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ABSTRACT

The author examines literature and research relating to the use of suggestopedia, suggestive-accelerative learning and teaching--SALT, with learning disabled children. Chapter I introduces the topic of suggestopedia with definitions of related terminology, and information on the purpose, significance, and limitations of the study to investigate why, how, and under what circumstances G. Lozanov's technique of suggestopedia can be used with the learning disabled population. A review of the literature is covered in Chapter II which covers research results, experiments, and studies using suggestopedia: an example of the Lozanov method: and SALT--the American Adaptation of the Lozanov Method. Specific cases in the applications of SALT to learning disabilities, including tutoring, ninth grade reading and mathematics, retention of unknown words, and remedial reading, are addressed in Chapter IV. Chapter V considers studies related to some of the components of suggestopedia/SALT (stress, relaxation therapy, biofeedback, imagery, self esteem, self statements and suggestions, and whole brain learning). Hypnosis, hypnotherapy, academic achievement, and suggestopedia are discussed in Chapter VI: while Chapter VII describes teacher characteristics and the training of teachers in suggestopedia. Chapter VIII points out research needs for the future. A final chapter provides a summary and concluding remarks. It is the author's contention that suggestopedia and similar techniques can be used to help distinguish learning disabled from nondisabled and suggestopedia or techniques similar to components of suggestopedia can and should be used more widely by teachers of children with learning disabilities as well as in the regular classroom. Appended are a description of physical and mental exercises, schedules, lists, and a sample lesson diagram. (SB)

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SUGGESTOPEDIA
AND ITS
APPLICATION TO THE EDUCATION
OF
CHILDREN WITH LEARNING DISABILITIES

by

Phyllis Perdew Brownlee, BA

An Essay submitted to the Faculty of the
Graduate School, Marquette University, in
Partial Fulfillment of the
Requirements for the Degree of Master of Education

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PREFACE

Over a year ago, I decided that the topic of suggestology, suggestopedia, SALT, or super-learning was of interest to me - enough so to support the necessary research into the topic to warrant writing my essay about it. What has become of special interest to me in this study is to what degree this technique, methodology, strategy can be used successfully with children with learning disabilities, as well as whether or not there are actually some children who do not really "fit" in the category of "learning disabled".

In this past year plus, I have found there is an abundance of information in obscure places, from Ames, Iowa to Sofia, Bulgaria. Or is it obscure information in an abundance of places? In any case, I have enjoyed my study and hope in my sharing of what I have found, I will stir or stimulate the curiosity of other educators, if only for them to be aware of the power of suggestion and of what effect their use of suggestion has on their many students.

The following paper is organized into nine chapters, separate, yet interconnected. Chapter I is the introduction to the topic and Chapter II deals with the theory and practice of the Lozanov Method and its American adaptation. Chapters III, IV and V deal in various ways with the use of suggestopedia and its various components with the learning disabled population, as well as information from various

studies with groups of both learning disabled and "normal" children. Chapter VI deals with hypnosis and hypnotherapy with children, specifically children with learning problems of various sorts. It also covers the similarities and differences between suggestopedia and hypnosis. Chapter VII is devoted to a review of teacher characteristics and teacher training programs. Chapter VIII centers on research needs for the future, and Chapter IX serves as the summary and concluding remarks.

Throughout this past year, in my investigation of suggestopedia, there are a number of people I have come in contact with who have been of assistance. Burt Wood, Tom Mahas and Bob Ward have all three been instrumental in giving encouragement and discussing their own perception of what they have thought suggestopedia was about - Bob particularly in helping me in my understanding of the similarities of suggestopedia and hypnosis. A special thanks to the three of them. Thanks goes also to the following who helped provide me with the valuable information, giving encouragement and answering my many questions - D. Schuster, C. Gritton, C. Pollack, W. Nelson, T. Barber, J. Taylor, M. Lachniet, L. Zuberbier and M. Ackerman. A final thanks goes to Tom Jessup, a very special student I've had contact with who led me to the use of imagery with life-threatening diseases, to the work of Simontons and Jampolsky and eventually to my current study of suggestopedia.

TABLE OF CONTENTS

PREFACE..... i

Chapter

I. INTRODUCTION..... 1

Background..... 1

Definition of Terms..... 2

Suggestion..... 2
Suggestology..... 3
Suggestopedia..... 3
Suggestive-Accelerative Learning and Teaching..... 4
Anti-Suggestive Barriers..... 4
Non-Specific Mental Reactivity..... 5
Pseudopassivity..... 5
Hypermnesia or "Supermemory"..... 5
Superlearning..... 5
Hypnosis..... 5
Hypnotherapy..... 6
Learning Disabilities..... 6
Behavior Characteristics..... 6

Purpose of this Study..... 7

Research Question..... 9

Significance of the Study..... 9

Limitations of the Study..... 9

II. REVIEW OF LITERATURE..... 11

Historical Background..... 11

Research..... 11
Suggestion..... 14
Influence on Education..... 16

Research Results, Experiments, Studies Using Suggestopedia..... 17

Foreign Lanugage Studies..... 17

Other Subjects..... 20

a) With Adults..... 20

b) With Children..... 21

Three Principles of the Brain..... 23

a) The joy or learning, absence of tension and concentrative psycho-relanation; b) Unity of the conscious and the paraconscious and the integral brain activity; c) The suggestive link on the level of the reserve complex.

Three Groups of Means..... 25

a) Psychological; b) Didactic; c) Artistic

Three Anti-Suggestive Barriers..... 26

a) Critical-logical; b) Intuitive-emotional; c) Ethical-moral

Six Methods for Creating a Positive Suggestive Atmosphere (Suggestive Factors)..... 29

a) Authority; b) Infantilization; c) Double Planeness; d) Intonation; e) Rhythm; f) Concert Pseudopassivity

Example of the Lozanov Method..... 37

Components and Physical Set-Up..... 37
Class Sessions - Three Phases..... 38

a) Review; b) Presentation of New Material; c) Seance

SALT - American Adaptation..... 41

Structural Differences..... 41

Suggestive Positive Atmosphere..... 42

Lesson Plans..... 43

Three Phases..... 44

a) Review; b) Active Presentation; c) Passive Presentation; d) Practice

III. APPLICATION OF SUGGESTOPEDIA TO LEARNING DISABLED CHILDREN..... 47

Introduction..... 47

Barriers Revisited..... 49

Logical/Critical..... 49

Intuitive/Emotional..... 50

Ethical/Moral..... 51

Special Considerations..... 51

Introduction..... 51

Anxiety, Fear..... 52

a) Theory; b) Related Research;

Avoidance Behaviors, Defense Mechanisms 55

a) Cognitive Change; b) Attitudinal Change

Self-Concept and Belief Systems..... 56

IV. SPECIFIC CASES IN THE APPLICATIONS OF SALT TO LEARNING DISABILITIES..... 58

Tutoring - Charles Gritton..... 58

Ninth Grade Reading and Mathematics - Schuster and Vincent..... 59

Fourth Grade Multiplication-Shultz..... 60

Observations, Tutoring - Pollack..... 61

Bulgarian Classroom Observation..... 61

Application in Learning Disabilities- Randy and Spelling..... 62

Continuing Developments and Materials..... 64

Retention of Unknown Words - Nelson..... 65

Design..... 65

Results, Limitations and Conclusions.. 66

Remedial Reading Class - Prichard and Taylor..... 67

Design..... 67

Suggestopedia Cycle..... 68

a) Day 1; b) Day 2

Results..... 70

Conclusions..... 71

Author's Observations and Comments.... 72

V. STUDIES RELATED TO SOME COMPONENTS OF SUGGESTOPEDIA/SALT..... 73

Introduction..... 73

Stress..... 74

Three Kinds of Stress..... 74

Symptoms of Stress..... 75

Sources of Stress..... 77

Additional Sources of Stress..... 78

Antidotes..... 78

Relaxation Therapy..... 79

Muscle Relaxation with Children..... 80

a) Kwako; b) Mantione; c) Ackermann; d) Klein and Deffenbacker; e) Pereboom;

Muscle Relaxation with Adults..... 87

a) Chaney and Andreasen; b) Wilson and Wilson

Anxious Behaviors..... 88

Biofeedback..... 89

a) Carter, Combined with relaxation; b) Lubar;

Alpha Training..... 91

Combination..... 92

a) "Quieting Reflex"; b) Lachniet, Relaxation and affirmations

Imagery..... 94

Background on Imagery..... 94

Imagery and Suggestopedia..... 95

Specific Case Studies and Relation to Suggestopedia..... 96

a) Imagery and disruptive behavior-Galyean; b) Rose; c) Beebe; d) Murdock; e) Houston

Self-Esteem, Self-Statements and Suggestions..... 103

Self-Esteem Learning Disabilities..... 103

Positive and Negative Self-Statements. 104

Powers of Suggestion..... 105

Limiting Beliefs..... 106

Motivation..... 107

Key Sources of Suggestion-Classroom... 107

Negative Suggestions about Learning... 107

Barber..... 108

a) Self Talk; b) Assumptions; c) Suggestions about self-suggestions; d) Training in using self-suggestions;

The Listener and Suggestive Effectiveness 111

Right Brain/Left Brain..... 112

Hemisphere Functions..... 112

Brain Mechanism..... 112

Educational Implications..... 113

a) Whole braining learning; b) Teaching at both halves;

Implications for Learning Disabilities 115

a) Research on dyslexia - right-brain bias; b) Personal account of dyslexic;

Personal Account of Victory over Dyslexia..... 118

VI. HYPNOSIS, HYPNOTHERAPY, ACADEMIC ACHIEVEMENT AND SUGGESTOPEDIA..... 119

Introduction..... 119

Definitions..... 119

Hypnosis with Children..... 120

a) Uses; b) Reasons for high susceptibility; c) Effectiveness, failure; d) Indications, counter-indications; e) Training;

Hypnosis as an Educational Tool..... 125

Rational, Variety of Uses..... 125

Cases and Studies..... 126

a) Krippner-Spelling, relaxation and study habits; b) Jampolsky and Haight-Reading problems; c) Willis-Reading rate and comprehension; d) Jampolsky-Sensory motor stimulation with number reversals

Conclusions..... 134

Hypnosis and Suggestopedia Similarities and Differences..... 135

Other Similarities and Differences.... 138

a) Waking state; b) Access to the unconscious; c) Special State; d) Rhythm; e) Cross-overs;

Stanton's Comparison..... 141

a) Importance of suggestion; b) Stage One-preparation; c) Stage Two-Presentation; d) Stage Three-practice; e) Summary

VII. TEACHER CHARACTERISTICS AND TEACHER TRAINING..... 145

Introduction..... 145

Teacher Characteristics..... 146

Teacher Training..... 149

Bulgarian Training..... 150

a) Importance of thorough training; b) Content of training; c) Problems;

U.S. Training..... 152

a) Components-1979; b) Components, 1980;

Summary-Training, World-Wide..... 154

VIII. RESEARCH NEEDS FOR THE FUTURE..... 156

General Needs..... 156

Specific Needs..... 157

Held..... 157
Winnykamen..... 157
Nelson..... 158
Schuster..... 159
Summary..... 160

IX. SUMMARY AND CONCLUDING REMARKS..... 161

APPENDIX A - EXERCISES..... 168

APPENDIX B - SCHEDULES, LISTS, SAMPLE LESSON DIAGRAM..... 179

BIBLIOGRAPHY..... 189

CHAPTER I - INTRODUCTION

BACKGROUND

Current trends in special education indicate that there continue to be many theories about why children have general or specific learning problems and do not succeed in our present school system. Is it the system, the child or a combination? According to various State and Federal laws (P.S. 94-142, and Chapter 115 of the Wisconsin Statutes), children with special educational needs are to be placed in the least restrictive environment, and in many cases that is interpreted as being a resource room or the regular classroom, rather than isolated in self-contained classrooms or special schools separate from the general school population.

As well as changes in the laws, a great deal of information is showing up in special education circles concerning hemispheric domination, a need to incorporate more of the brain's function, evoked brain potential, differential lobal development, and food and metal sensitivities as related to brain function and malfunction. This was particularly noted in the scientific studies division of the recent Association for Children with Learning Disabilities (ACLD) International Conference held in Milwaukee, Wisconsin, in February of 1980.

Additional information continues to be available on current, as well as revised teaching techniques and methods, being researched as to their effectiveness with the learning disabilities population. One such technique is called Suggestology (suggestopedia when applied to education) and its American adaptation - suggestive-accelerative learning and teaching (SALT).

Attention will be given to an historical background of Suggestopedia, applications in the US, adaptations for the population of learning disabled children, hypnotherapy with children with learning problems, related components and where they've been used, teacher training, and future research needs. Extensive appendicies will include addresses of important people and places, and copies of actual scripts and worksheets from programs currently in operation. A tape of a morning in the remedial reading room of Jean Taylor (Huntley Hills Elementary School in Chamblee, GA) is also included.

DEFINITION OF TERMS

Suggestion: "A universal form of psychic reflexion during which, in stimulating the unconscious psychic activity, we succeed in creating in the individual's world a special mental disposition directed to open his internal reserves and potentials." [1](Lozanov, 1973, p.40); suggestion participates in every communicational act.

[1]Georgi Lozanov, Problems of Suggestology, Sofia, Bulgaria: Navka, Iskostvo, 1973.

Suggestology: "The science of the art of liberating and stimulating the personality both under guidance and alone."[2] (Lozanov, 1978). "The study of the psychology of suggestion; an optomistic philosophy of human learning potential based on a holistic concept of human nature."[3] (Belanger, 1978).

Suggestopedia: "The application of suggestology to instruction, education, training; instructor-based, classroom instructional technology borrowing from traditional instructional methodology, relaxation techniques, Zen breathing, music therapy, and gold old-spaced repitition"[4] (Mirabel, 1980); "the use of waking state suggestions and unusual presentation styles to accelerate classroom learning"[5] (Schuster, Bordon and Gritton, 1976). "A system of instruction not aimed solely or mainly at improving man's memory. It also stimulates intellectual activity, raises the emotional tone, improves the socio-psychological coherence and has a favorable effect on the whole personality of the student"[6] (Lozanov, 1971 in Pollack, 1976).

[2] Georgi Lozanov, Suggestology and Outlines of Suggestopaedy. New York: Gordon and Breach, 1978.

[3] Bagriana Belanger, "Problems Related to the Application of Lozanov's Method in Different Countries." The Journal of Suggestive, Accelerative Learning and Teaching, 1978, 3(3), pp. 175-180).

[4] Thomas E. Mirabel, "Suggestology and Suggestopaedia: A New Training Technique." A workshop developed by Thomas E. Mirabel for the Dallas Regions HRD Network.

[5] Donald H. Schuster, Ray Bordon and Charles Gritton, Suggestive, Accelerative Learning and Teaching: A Manual of Classroom Procedures Based on the Lozanov Method. Des Moines, Iowa: Society for Suggestive, Accelerative Learning and Teaching, 1976.

[6] Georgi Lozanov, Suggestology, Sofia, Bulgaria: Izdatelsvo Navka, Iskostvo, 1971. Cecelia Pollack, "Education of the Whole Brain: Suggestopedia." Talk given to the Orton Society, March, 1980, available as a reading copy.

> "Concerned with breaking down the student's self-erected barriers to learning by building up his confidence in himself, the teacher, the method and the course, as well as by developing his imagination, his sense of humor, and his esthetic sense". [7](Belanger, p. 153 in Thogmartin, 1978);
>
> "A creative process that harnesses human energy through music, art, poetry and the best and most humanistic aspects of our culture, for the purpose of realizing new and expanded levels of human potential". [8](Pollack, 1980).

Suggestive-Accelerative Learning and Teaching: The American adaptation of Suggestopedia, a method which uses:

> "aspects of suggestion and unusual styles of presenting material to accelerate classroom learning. The essence of this technique is using an unusual combination of physical relaxation exercises, mental concentration and suggestive principles to strengthen a person's ego and expand his memory capabilities plus relaxing music while material to be learned is presented dynamically." [9](Schuster, Bordon and Gritton, 1976, p. 1).

Anti-Suggestive Barriers: Psychological barriers which protect the personality from harmful effects, or what it perceives as being harmful. Lozanov identifies these three barriers: 1) the critical-logical barrier which rejects everything which does not give an impression of well-intended logical motivation; 2) the intuitive-effective which rejects everything which fails to create confidence and a feeling of security; and 3) the ethical-moral barrier which rejects every-

[7]Clyde Thogmartin, "Book Review of La Suggestologie: Les Theories Revolutionnaries du Dr. Lozanov et leurs applications en padagogie. Psychologie et Medecine" The Journal of S.A.L.T., 3(4), Winter, 1978, pp. 290-296.

[8]Cecelia Pollack, "Education of the Whole Brain: Suggestopedia." Talk given to the Orton Society, March, 1980, available as a reading copy.

[9]Schuster, Bordon and Gritton, ibid, 1976.

> thing which is in contradiction to the ethical principles of the individual. [10](Lozanov, 1978).

Non-Specific Mental Reactivity: "That type of paraconscious or unconscious mental activity which is sensitive to and perceptive of the non-verbal, subliminal components of communication." (A positive suggestive atmosphere uses non-specific mental reactivity to tap the 90% unused capacity of the mind) [11](Lozanov, 1971).

Pseudopassivity: That state of being wherein one appears calm externally (as in quietly, intently listening to a concert) but where internal unconscious activity is taking place.

Hypermnesia or "Supermemory": Unusually exact or vivid memory, semi photographic memory.

Superlearning: "An eclectric system for accelerated learning of factual data resulting from westernized, modernized techniques for developing supermemory; generally refers to all the learning systems that work holistically to develop reserves of the mind and body." [12](Ostrander and Schroeder, 1979)

Hypnosis: The AMA defines hypnosis as:

> "A temporary condition of altered attention, within which a variety of phenomena may appear spontaneously or manifest themselves in response to verbal or other stimuli." [13]("Hypnosis..."); a combination of confidence and suggestion, a medical tool, susceptibility to suggestion is increased in hypnosis.

[10]Lozanov, Suggestology and Outlines of Suggestopaedy, 1978.
[11]Lozanov, Suggestology, 1971
[12]Sheila Ostrander, Lynn Schroeder with Nancy Ostrander, Superlearning. New York: Delacourte Press, 1979.
[13]"Hypnosis is Nothing New". Brochure on questions and answers about hypnosis available through Robert C. Ward, Ft. Myers, Florida.

Hypnotherapy: The use of hypnosis to assist in the elimination or reduction of habits of thought and behavior which are interfering with the individual's functioning and satisfaction with life and self.

Learning Disabilities:

> "The handicapping condition of learning disabilities denotes severe and unique learning problems due to a disorder existing within the child which significantly interferes with the ability to acquire, organize of express information. These problems are manifested in school functioning in an impaired ability to read, write, spell or arithmetically reason or calculate.
>
> Academic funtioning. A child whose primary handicapping condition is due to learning disabilities shall exhibit a significant discrepancy between functional achievement and expected achievement. A significant discrepancy is defined as functional achievement at or below 50% (.5) of expected achievement.
>
> Intellectual functioning. Children whose primary handicapping condition is due to learning disabilities shall exhibit normal or potential for normal intellectual functioning." [14] (Rules Implementing Subchapter IV of Chapter 115, Wisconsin Statutes).

Behavior Characteristics:

1) Hyperactivity
2) Perceptual motor impairments
3) Emotional lability
4) General orientation defects
5) Disorders of attention
6) Impulsivity
7) Disorders or memory and thinking
8) Specific learning disability in reading, arithmetic, writing and spelling
9) Disorders of speech and hearing
10) Equivocal classical neurological signs and EEG irregularities

[14] Rules Implementing Subchapter IV of Chapter 115, Wisconsin Statutes, Wis. Dept. of Public Instruction, Register, 1978.

PURPOSE OF THIS STUDY

A number of researchers, teachers and experimenters have investigated the writings of Dr. Georgi Lozanov concerning suggestology and suggestopedia. Many have applied what they understand to be the theory of suggestology through very specific techniques and practices in the teaching primarily of foreign languages and recently, other subjects. Fewer still have applied theory and practice with the special population of students identified as having learning disabilities.

Because many components of suggestopedia and SALT address some of the more prevalent problems or characteristics of a learning disabilities population; namely, hyperactivity, limited attention span, low self-esteem, anxiety related to school, poor ability to cope with stress, development of disfunctional defense mechanisms, and varying degrees of frustration brought on by school failure, it was felt by this author that a close examination of Suggestology and its American version, SALT, was in order. In her investigation, the author also found that there were many similarities between Suggestology and SALT and techniques used in hypnotherapy for children with learning problems, as well as specific studies using relaxation training and biofeedback, that the current study was expanded to include these specific techniques.

Because the various methods mentioned above have been used successfully with small populations of learning

disabled children, it is the author's opinion that these techniques will work with even a larger population of so-called learning disabled and may be successful in isolating out that portion of the learning disabled population who are not specifically disabled because of physiological-neurological impairments. These children may well be disabled because they learned to be. Someone decided they were disabled and they complied, their disabling behaviors (impulsivity, hyperactivity, anxiety, short attention span) may actually be part of their coping or defense mechanism they learned to use when confronted with academic material they were not ready for.

Helping these children function to their fullest capacity should be the goal of any regular or special educator.

It was the intent of this author, as a teacher of children with learning disabilities, to sort through the available literature to discovery why, how and under what special conditions suggestopedia can be used successfully with this special population. It is the author's contention that there are a number of children who are identified as learning disabled who are actually "decisionally disabled" who believe (or believe in their parents' or teacher's belief that they are disabled) in their inability to learn and have decided on an unconscious level to act out that belief. The author also contends that there are also another group of children identified as learning disabled whose symptoms are actually reactions to being presented with learning materials which they were not maturationally ready for, and in their

frustration, developed a host of coping and defense mechanisms.

If there is a technique or teaching strategy which will help these children decide that they can learn and that learning need not be frustrating, then they can be helped to develop to their full potential.

RESEARCH QUESTION

In view of the purpose of the study, the author is questioning why, how and under what special conditions suggestopedia can be used with the learning disabilities population and if in fact it has the potential of helping to sort out those children who for a variety of reasons can actually function quite well in the regular classroom and no longer need to be labeled as "learning disabled."

SIGNIFICANCE OF THE STUDY

If in fact there are a number of children who are not truly "learning disabled" as a result of neurological impairment, who are "decisionally disabled" or who are actually exhibiting symptoms rather than causes and if the suggestopedic teaching system can help them overcome their disability or help them decide they are no longer disabled, then the author contends that this system should be used more widely with this population, both in special classrooms and in the regular classroom.

LIMITATIONS OF THE STUDY

This study is limited simply to the question

of why, how and under what circumstances (conditions) suggestopedia can be used with the learning disabilities population. Related studies of the use of relaxation therapy, biofeedback, imagery and hypnotherapy with children with learning disabilities and how they support the use of suggestopedia was also examined in hopes of clarifying the basic question.

CHAPTER II - REVIEW OF LITERATURE

HISTORICAL BACKGROUND

Dr. Georgi Lozanov, a Bulgarian physician, psychiatrist and psychotherapist, spent more than twenty years studying the areas of purported human abilities at developing super memories and the powerful use of suggestion. He theorized that what he found in his numerous experiments, projects and research could be applied to the field of education, thus the birth of suggestopedia. Lozanov had an early interest in both parapsychology and in yoga. His studies at the University of Sofia included psychology and psychiatry. His scientific thesis, submitted to the Kharhev Medical Society in 1971, was on the topic "Suggestology and Suggestopedia - the Application of Suggestion in the Fields of Medicine and Education", which was subsequently accepted and later published. [1](Lozanov, 1971, 1978).

Research

Dr. Lozanov's published interest in suggestion and in hypermnesia dates back as far as 1955 when he first published an article on suggestive hypermnesia. Prior to that, in 1952-53, he is reported to have made studies of hypnotic age regression. In his interest in yoga (a practitioner of Raja Yoga himself for twenty years), he became aware of the many yogis who had developed what appeared to be phenomenal capacities at remembering lengthy histories of a society (Indian Brahmins, as well as the Maories of New Zealand).

[1]Lozanov, Suggestology, 1971 and Suggestology and Outlines of Suggestopaedy, 1978.

One such individual, Maori Chief Kaumatana, recites the entire history of his tribe which covers forty-five generations over a period of one-thousand years. He recites it all in three days and uses no notes! Yogi Sha, of Bombay, also came to Lozanov's attention. After a year of daily exercises, Sha had developed hypermnesia (supermemory) to the level where he could instantly recall many eighteen number columns, remember the name and day of the week for any date in a given century and remember photographically the arrangement of scores of objects he'd barely glimpsed. [2](Ostrander and Schroeder, 1979).

In the 1950's, Lozanov also 1) studied such areas as hypnotic age regression, desynchronization of eye movements; 2) wrote publications on suggestive hypermnesia on the study of heartbeats under hypnosis, and a text on "suggestion"; and 3) used suggestion to treat diabetes, acute ulcer and various other medical cases.

As reported by Bancroft[3] (1976), the unofficial English translation of Lozanov's thesis refers to the yoga investigations of Dr. Lozanov and his staff which comprised 1) the investigation of the changes in pulse and brain waves which occurred during the taking of particular postures which are part of the physical exercises of Hatha yoga; and 2) a consideration of Raja Yoga which emphasizes mental concentration, self-discipline and meditation. It is supposed than that through the use of both self-relaxation and mental concentration (as earlier reported by Lozanov in his studies of yogis), we are then able to activate the auto-suggestive

[2]Ostrander, ibid, Superlearning, 1979.
[3]W. Jane Bancroft, "Suggestology and Suggestopedia: The Theory of the Lozanov Method." Unpublished document available through ERIC (ED 132 857), 1976, 54 pages.

mechanisms and make available the unconscious reserves of the mind (that 90% of the mind's capacities which go untapped most of the time).

In these studies of yogis, Lozanov found that hypermnesia was linked to relaxation and concentration. He found that we have all stored a phenomenal amount of information in our brain (as proven in Dr. Wilder Penfield's brain research) and that he needed to study how we can increase our capacities for memorizing and what goes into the remembering of what would appear on the surface to be inconsequential things. What he found was that we learn both through the conscious and unconscious or paraconscious levels, and that a "suggestive set-up" can be used where in subsensory stimuli are directed towards the memory reserves of the unconscious. Lozanov and others [4](Yotsukura, 1975, Roberts and Clark, 1975) contend, as shown in recent anatomical and physiological demonstrations, that we use only about 4 to 10% of our brain's capacity. The rest remains as unused reserves. How to tap and use the other 90-96% of our capacity has occupied his subsequent research. Tapping these reserves and setting these memory reserves to work appears to come about through suggestion.

In the 1960's, Lozanov did experiments in suggestive hypermnesia, telepathic phenomena, psychogenic anesthesia, hypnopedia, memorization of one-thousand French words using

[4]S. Yotsukura, "Suggestology and Language Teaching." Unpublished manuscript, Global University, 1975; and T. Roberts and F. Clark, Transpersonal Psychology in Education, Phi Delta Kappan, 1975.

a single session, memorization associated with subsensory stimuli, memorization associated with prestige, testing retention, integral psychotherapy, and even experiments in suggestopaedic teaching dating back to 1965.

Since that time, many research projects have developed testing various aspects of the Lozanov method with various subjects under differing conditions in efforts to replicate Lozanov's results and elaborate on his method.

Suggestion

According to Lozanov[5] (1975), it is impossible to have either a pedagogic or a communicative process without suggestive aspects at all times. Suggestions come through the communication process which is both conscious and logical, as well as unconscious and emotional. It is the unnnoticed subconscious factors which contribute a great deal as suggestive factors.

We are already quite familiar with the use of suggestion, particularly through advertising. Many advertisements, both on TV and the radio are geared to hit below the level of consciousness and encourage us to buy products without our knowing entirely why we are purchasing particular items. Suggestion is also key to a writer's capturing the attention of a reader or an actor winning over an audience by appealing to their emotions (or unconscious).

According to Racle[6] (1977), suggestion can lead in a positive direction toward the full development and

[5]Georgi Lozanov, "Round Table". In: A Teaching Experience With the Suggestopaedic Method, Ottawa, 1975.
[6]Gabriel Racle, "Suggestopedia-Canada", July, 1977-2, pp. 2-9.

flowering of the personality and its capacities or in the direction of the limiting of the personality [7](Nelson, 1980). Direct suggestion can do either of these through verbalization. Indirect suggestion though is directed at the unconscious where it is picked up on the marginal level of perception and goes into the realm of emotions. These suggestions too can be either positive or negative.

One of the techniques studied by Lozanov was the "whispering method" used in Soviet-inspired psychotherapy. It is a method in which "the therapeutical suggestions are presented in a whisper under the threshold of the conscious hearing of the patient, in order to overcome anti-suggestive barriers (or mental blocks to suggestion) and to affect the unconscious mental activity" [8](Bancroft, 1976, p.27).

Racle[9] (1977-2), in his article on suggestion and management reports that Lozanov, after many years of success with his patients, began to wonder why he was successful. What he realized was that his success was tied to certain suggestive factors which were present in each case. "The results...confirm our concept of a therapeutic mechanism common to most psychotherapeutic methods." [10](Lozanov, 1971, p.17).

[7]Wally Nelson, "Experimentation with the Lozanov Method in Teaching Word Retention to Children with Learning Disabilities." Unpublished paper available through the author, soon to be printed in the Journal of S.A.L.T.
[8]Bancroft, document available through ERIC, ibid., 1976.
[9]Gabriel Racle, "Suggestopaedia-Canada." July, 1977-2, pp. 2-9.
[10]Lozanov, Suggestology, 1971.

After extensive research on these factors, Lozanov reports that "after fifteen to twenty years as a psychotherapist, I think there are some factors in this psychotherapeutical communication which get good results. I've come to the conclusion that the same results are possible in pedagogical processes." [11](Lozanov, 1975, p. 202).

Influence on Education

What Lozanov refers to is the communication process between the doctor and patient (and in education between teacher and student) which is unconscious or emotional in nature and conveys a message. (The confidence the patient has in the doctor, the doctor's expressed confidence in a "cure", etc.)

Unfortunately, suggestion has brought about limiting factors. As Lozanov reports and Racle[12] (1977-3) expands on, we all live in a society in which a social suggestive phenomenon determines our social behavior. A social norm is set up which governs our attitudes which can result in routine, fear of novelty, and incompetence, particularly in the school setting, this is seen in the form of insistence on effort, that learning is difficult, the parcelling of subject matter, etc. Even our own ignorance of our own real capacities limits us.

In applying what he studied to the field of education, Lozanov developed a method (the Lozanov Method) which would bring about both physical relaxation and mental

[11]Georgi Lozanov, "Suggestopaedy in Primary Schools." Suggestology and Suggestopaedia, 1975, 1(2), 1-3.
[12]Gabriel Racle, "Suggestopaedia-Canada." 1977-3, Public Service Commission of Canada, Ottawa, Canada. Staff Developmental Branch.

concentration. While the student is in this relaxed state, he is more open to suggestion and can receive information more readily in the form of "suggestions" coming from the environment or from the teacher.

Lozanov developed suggestopedic teaching as a desuggestive-suggestive system which helps free the learner to developing greater capacities simply by suggesting that it is possible and by counteracting the various psychological barriers which the individual ego develops to protect itself (referred to as the anti-suggestive barriers). The restrictive barriers are desuggested and a positive suggestive atmosphere is created where learning is both easy and pleasant. How this is done, the specific techniques and methods will be discussed further on.

RESEARCH RESULTS, EXPERIMENTS STUDIES USING SUGGESTOPEDIA

Because of the numbers and varying claims, some of the research results, experiments and studies using all or parts of the suggestopedic method are listed below. This is not an exhaustive list but is included to show the current variety of subjects being handled as well as replication and verification of accelerated learning using this method.

Foreign Language Studies

Lozanov (1971) found he could teach a minimum of 1,000 new words in six weeks of class, three hours a day; that students could learn five to fifty times faster for any school subject; and in the language learning found retention of 88% after 6 months and

57% after 22 months after completion of training with no use of the material in the intervening time.

Bancroft (1976) after many visits of Bulgaria and personal talks with Lozanov and others reports some students learned as much as 1,800 words in one day, but usually, they learned 80 to 100 per day.

Mariana Kurkov in 1970 taught Russian at Cleveland State College and covered twice the normal amount of content in college level Russian with a high level of retention.

Racle (1975) used the suggestopedic method in Canada in bi-lingual training and found that students learned French much faster and with greater achievement than they typically would in the standard 21-day period.

Elizabeth Philipov (1975) taught Bulgarian during the '73-'74 school year to students at University of California at San Diego with a three to one increase over a Russian language class control.

Wolkowski (1974) reports 92% rentention for 3,000 words taught and used in context after 30 days of teaching four hours a day for Russian and French.

Smirnova (1975) found the suggestopedic training groups learned three times as much foreign vocabulary with 90% retention when learning the vocabulary of the student's specialization.

Elizabeth Robinett (1975) taught first year Spanish at Texas Tech University and found significant results in favor of the experimental group.

Kathleen Herr (1978) taught the equivalent of a full year first-year college course in language over a period of 14 days. Time spent in class equaled six and one-half weeks, students learned 1,500 words, shared positive reactions to instruction and each day averaged 74.1% recall of the previous day's material.

Peter and Nancy Kline (1974) of the Sandy Springs Friends School in Maryland taught one year's Latin course in five weeks with three hours of instruction a day, 100 words a week, with retention of 95%.

Schuster (1972) used different types of suggestion and relaxation techniques while teaching Spanish. He found that early pleasant learning recall produced retention of 37% better than the reference technique and sensory experience was 14% better than the reference technique.

Schuster and Bordon (1972) had a three-to-one speed up in teaching Spanish on the college level.

Bordon (1976) reports having taught one year of Spanish in two weeks showing a seven-to-one speed up.

Bordon and Schuster (1976) compared the use of suggestion, rhythmic breathing and music for the

learning and retention of Spanish. Suggestion was 60% better than no suggestion, breathing was 47% better than non-synchronized breathing, and music was 25% better than no music. The best combination for initial learning was the synchronized breathing and music with 78% better than non-synchronized and no music. On long range recall, the combination of all variables yielded a 172% increase over none of the variables.

In a concern for whether or not students were just parroting back the foreign language material they had learned so rapidly, Novakov (1975) found a high percentage of new thoughts (89%) being used by students as well as 93% use of newly formed sentences in his study. This confirmed for him that the students were not just parroting, but had actual comprehension of the new material.

Other Subjects

Further studies show the use of suggestopedic techniques in areas other than foreign language teaching.

a) With Adults:

Schuster (Schuster, Bordon and Gritton, 1976) taught introductory statistics in a tutoring setting and found students who initially had dreaded taking the course and were afraid of failing had a more positive attitude about themselves and statistics.

Hideo Seki (1980) of the Tokai University in Japan used suggestopedia to teach technical

material to a large group of students. The Lozanov group had means of 16 to 18, the conventional group had a class mean of 10 with the full mark being 30.

Tom Mirambel (1980) in a presentation of the advantages of the use of suggestology to trainers cites five advantages: savings of money, group instruction, an enjoyable way to learn difficult material, higher retention, and it works well with all levels of age, education, intelligence and ability.

b) With Children:

Lozanov (1971) started teaching other subjects to Bulgarian students and found their learning accelerated, they were feeling more self-confident and their health improved.

Lozanov (1975) started using suggestopedia for reading and math instruction in the primary school. At the end of the year, students in the experimental group had higher reading levels and better comprehension; in math, they were able to solve most of the test problems where as controls couldn't solve any.

Lozanov (1976b) also reports of a case where the entire first year's curriculum course work was covered in 3½ months. Teachers filled out the school year by first teaching English as a second language then teaching the first year of German!

Pollack (1978) reports of her visit to School #122 in Sofia where all grades had completed at least two

years of curricula in four months. She observed after only four months of school a group of first graders reading and discussing an advance folk tale on the third grade level, as well as a group of third graders working out lengthy algebraic equations, contrary to Piaget's developmental stages.

Gritton (Schuster, Bordon and Gritton, 1976) as previously reported used the method in tutoring two students in spelling and math with remarkable results.

Gritton (in Schuster, Bordon and Gritton, 1976) has used suggestopedia for math and science as well as other subjects in the junior high. In eighth grade math, student attitudes changed markedly, they were more attentive, interested in learning and doing so. The ninth grade science group had the same results.

Gritton and Bordon (1976) used the Lozanov approach during one-fifth of the class time for junior high science using waking suggestions and unusual presentation styles in order to accelerate learning. When adjusted for pretest differences with the control group, the experimental students showed significantly higher post-test scores.

Prichard and Taylor (1976) found gains of over twenty months in oral and silent reading in a remedial setting after twelve weeks of instruction preceded by two weeks of instruction in relaxation and visualization exercises. Eighty percent (80%) of the students gained a year or more on the Spache oral reading subtest while 75% of them made the same gains on the silent reading subtest.

JoLene Somsky (1980) uses a technique called "Teaching with Love" wherein she uses SALT techniques with second graders in Sioux City, Iowa.

Franz Beer of Vienna, Austria, reports replication of the Lozanov technique in reading and arithmetic with very positive results.

THE LOZANOV METHOD

The Lozanov method is designed to appeal to and tap the unconscious mental activity of the learner, thereby accelerating learning, through the use of suggestion. The suggestopedic teaching system helps organize the unconscious suggestive factors inherent in the learning process by creating a learning environment which appeals to both halves of the brain and activates the reserve capacity of the brain.

In his many years of study of suggestion and its therapeutic use, Lozanov writes that in suggestopedy various psychophysiological principles are taken into consideration and create requisites for tapping the distinctly formed reserve complex in the student. Three basic principles of suggestopedia are derived from Lozanov's basic theory of suggestology. These three principles, when observed simultaneously, combine with the use of the three groups of suggestopedia means to bring about the revealing of the reserve capacities.

Three Principles of the Brain

In his book [13](Lozanov, 1978), Lozanov states that the three principles of suggestopedy are: 1) the joy of learning,

[13]Lozanov, Suggestology and Outlines of Suggestopaedy, ibid, 1978.

absence of tension and concentrative psychorelaxation, 2) the unity of the conscious and the paraconscious and their integral activity, and 3) the suggestive link on the level of the reserve complex.

a) The joy of learning, absence of tension and concentrative psychorelaxation:

Lozanov and others found that when students are relaxed and feeling good they can memorize easier. There should be a joy in every moment and both mental relaxation and concentration without tension should be taken for granted (p. 258). This is quite contrary to what we usually see in students straining to learn and trying to remember large quantities of information.

b) Unity of the conscious and the paraconscious and the integral brain activity:

In the second principle, both hemispheres of the brain are to be stimulated and that teaching and learning should be organized to utilize the conscious reactions and function of the student as well as his paraconscious activity and reactivity.

c) The suggestive link on the level of the reserve complex:

The third principle, the suggestive link, dictates that the process of instruction be reconstructed so that mutual relations are created (rapport). This level of suggestive link can be measured by how much the reserves of the student have been tapped (more information is assimilated for longer periods of time during which time the student is more highly creative and acquires a positive psychophypienic and psychotherapeutic effect). All three of these principles are to be operating simultaneously along with the simultaneous and indivisible unity of three groups of suggestopedic means.

Three Groups of Means

The three means are: 1) psychological, 2) didactic, and 3) artistic.

a) Psychological:

In the psychological, the teacher needs to be aware of creating a psychologically relaxing atmosphere and be generating positive emotions. Material is always organized in such a way that there is awareness of the emotional components of learning, that stimulation is picked up directly and peripherally and that the teacher be trained in such a way as to be able to organize and use the peripheral stimuli. (This relates to such things as whether or not the teacher's verbal and non-verbal messages agree with each other.)

b) Didactic:

The didactic means is accomplished by organizing learning material in what are called "global themes," or big units, where the small elements are given and absorbed peripherally. Attention is directed to the whole task, rather than to each small, separate part. An example would be the teaching of handwriting through the writing of whole words and sentences, rather than the laborious production of separate sticks, balls, and finally individual letters. As mentioned later in this paper, this method relates to appealing to the right side of the brain, in seeing things as a whole, rather than simply as parts.

c) Artistic:

The artistic means is accomplished in various ways and is key to the stimulation of the right hemisphere, helping

to create a relaxed atmosphere and implementing the joy of learning. This can be done by incorporating the material to be learned into the form of a play, an opera, a song, or some visual art form. In his studies of psycho-acoustics, Lozanov found that music of a particular form and rhythm induced a relaxed state leaving the paraconscious mind more alert and able to concentrate far more than the conscious state.

Through the joy of learning and the ease with which information is learned the old norms and belief system that there is an IQ ceiling can be desuggested or demythized. The student (and, of course, the teacher) no longer needs to believe that there is limited potential. In Lozanov's words, the important aim of suggestion is "to free, to desuggest and to explain to students that human capacities are much greater than expected, and to provide liberating-stimulating methods to bring these locked-up human resources into play." [14](Lozanov, 1978, p. 251).

How then is this "ideal" suggestive state accomplished in which the student learns joyously, more than before and with a minimum of effort.

Three Anti-Suggestive Barriers

Before this rapid, joyous learning can happen, there are three anti-suggestive barriers to deal with which are part of the personality's mental protective system to guard against any harmful effects of suggestion. These are psychological barriers which block our reception to suggestion. These three barriers are: 1) critical-logical, 2) intuitive-emotional, and

[14]Lozanov, Suggestology and Outlines of Suggestopaedy, ibid, 1978.

3) ethical-moral.

a) Critical-logical:

This barrier exists to reject suggestions which the individual judges to be rationally unacceptable. An example as related to accelerated learning mentioned in Schuster, Bordon and Gritton (1976) would be something like, "All this speed learning business is nonsense. I have never learned fast and easily in my life, so why should I now?" As mentioned earlier, not only do we have societal norms which limit our capacities, we also have personal norms which reinforce our belief in our limitations. These norms develop very early and were established through previous experience and reinforced by negative comments by teachers and/or parents ("What a worthless paper!"). The suggestopaedic instructor can counter this type of desuggestive barrier by filling the learning atmosphere with positive suggestion, imply that the student will be successful with this method and that the instructor wants the learning process to be easy and successful for him.

> "You will find out soon in this course that you can learn much more quickly and much more easily than you have in any course in the past. While you may not believe me at the moment you will shortly because we will have some ungraded tests to show you that I know what I am talking about. As a result you will find that your learning ability is indeed much higher than you currently think possible. But wait and see."
> [15](Schuster, Bordon and Gritton, 1976).

b) Intuitive-emotional:

This barrier serves to reject anything likely to produce a feeling of lack of confidence or insecurity about our

[15]Schuster, Bordon and Gritton, ibid, 1976.

learning ability. Many students, as a result of being subjected to authoritative negativism from teachers and parents, have a low opinion of their learning capacity and feel insecure about their learning ability. This can be counteracted with suggestions about understanding the problem and by showing confidence in the student's ability so that the student can learn without reservations or fear [16](Nelson, 1980).

The instructor may say the following:

> In the past you may have been concerned about your learning ability. This is very common, and as a matter of fact, prevalent throughout our society. The basis is your previous interactions with your teachers and parents. However, in this course you are going to find that learning will be easy and that you can learn with fun. After a short period of time you'll develop a considerable confidence in your ability to learn easily. Just wait and see. Shortly you will understand what I'm saying and you will develop confidence in what I am saying. [17.1](Schuster, Bordon and Gritton, 1976).

c) Ethical-moral:

The student rejects everything not in harmony with the ethical sense of the personality - the ethics and morals of learning. Thanks to the Protestant work ethic, we have been raised with the idea that learning is unpleasant and hard work and that somehow something is wrong if learning somehow is easy. [17.2]Lozanov (1971) writes that it is incorrect to link memorization with great stress and strain. "The correct maxim in principle that everything can be acquired with labour

[16]Nelson, ibid, 1980.
[17.1]Schuster, Bordon and Gritton, ibid, 1976.
[17.2]Lozanov, Suggestology, ibid, 1971.

is wrongly understood and the students remain with the conception that they should make extreme efforts to memorize." 17.2 (p.258). Unfortunately, this level of extreme effort brings on fatigue and reduces memory capacities. Counter statements from the teacher would emphasize that learning is easy for the effort put in (you'll get more for your money).

All three of the desuggestive or anti-suggestive barriers must be dealt with through verbal and non-verbal communication from the teacher and from the positive learning atmosphere created by the teacher. One needs to desuggest the barriers to accelerated learning, helping to overcome the mental blocks to greater memorization.

Desuggestive barriers circumvention [18](Schuster, Bordon and Gritton, 1976, p. 13) is one of several techniques and devices used to establish the suggestive positive atmosphere. When you can bypass the anti-suggestive barriers, you can reach the reserves of the mind. Accelerated learning is one of the human capacities located in the reserves of the mind.

Six Methods for Creating a Positive Suggestive Atmosphere (Suggestive Factors)

Six specific techniques are used to help create the suggestive positive atmosphere which is necessary to utilize what Lozanov calls the non-specific mental reactivity of the mind [19](Lozanov, 1971). This non-specific mental reactivity is an essential part of the unconscious, is responsible for intuitive insight and is capable of perceiving the hidden sense in human speech. Using this non-specific

[18]Schuster, Bordon and Gritton, ibid, 1976.
[19]Lozanov, Suggestology, ibid, 1971

mental reactivity is a way to circumventing or surmounting the anti-suggestive barriers previously mentioned. The stimulation of non-specific mental reactivity is brought on by the utilization of these six components: authority, infantilization, double-planeness, intonation, rhythm and pseudopassivity. The non-specific mental reactions, activated by the six suggestive factors help in breaking down the anti-suggestive barriers. Learning capacities are enhanced as a result.

a) Authority:

The authority of the teacher or instructor is not to be confused with the idea of authoritarism. What is meant by the authority of the instructor has to do with the prestige of the instructor or the source of the information, prestige of the learning environment, the knowledge the instructor has of the subject, the sense of responsibility and devotion to one's society as well as a sympathetic understanding of one's fellowman [20](Bancroft, 1976; Nelson, 1980). The teacher should express a positive, enthusiastic attitude toward the students and the subject being taught, show sympathy and understanding of the students, yet keep a certain distance from the students. Negative gestures or words are not to be used - correction comes only in passing and in a positive fashion. Under this influence, without the student knowing it consciously, he(she) will much more readily take as suggestions what the teacher says, be more motivated to learn, and be more receptive to

[20]Bancroft, "Suggestology and Suggestopedia: The Theory of the Lozanov Method", ibid, 1976. Nelson, ibid,1980.

additional stimuli and information. In Lozanov's studies, authority alone as the only suggestive factor affected students obtaining a high percentage of memorization of foreign language words and phrases. It was found that students remember best what comes from an authoritative source, such as the words or poem of a nationally famous and revered poet or act as opposed to an obscure one [21](Lozanov, 1978). "The suggestive stimuli emanating from an authoritative person or source affect the unconscious...even though the individual may be unaware of the stimuli influencing him, he reacts, nonetheless." [22](Bancroft, 1976, p. 32). Think of how easily we accept the conclusions or information from a well-known personality who may be advertising a certain product or requesting funds for his or her favorite charity.

b) Infantilization:

Closely connected to authority is infantilization, wherein the students behave in a childlike fashion (not childish though). In this state, they are in a sense re-capturing the initial joy they recall when first learning, are eager to learn and take the instructor's suggestion more effectively than otherwise. Generally, the greater the authority, the greater the infantilization on the part of the students. Learning was easy when we were children, and over the years we have developed the belief that learning is hard. Through various techniques, such as physical and mental relaxation, use of various art forms - such as plays and relaxing music -

[21]Lozanov, Suggestology and Outlines of Suggestopaedy, ibid, 1978
[22]Bancroft, "Suggestology and Suggestopedia: The Theory of the Lozanov Method." ibid, 1976.

and the use of games and pretend situations, the childlike qualities of the students are activated and utilized. While in this childlike state, the student is less likely to be critical of the statement that learning can be fun and easy and will be less likely to block his potential capacities of greater memorization. Infantilization brings out spontaneity, an absence of the feeling of pressure, the mind is calm and there is no fatigue. [23](Bancroft, 1976). According to Lozanov (1978), infantilization is:

> a universal reaction of respect, inspiration and confidence which, without disrupting the level of the normal intellectual activity, considerably increases the perception, memory and creativity functions. In infantilization, perception, memorization and creative imagination seem to return to some extent, to the more favorable level of the earlier age period. (p. 191) "In suggestive infantilization, a set-up of confidence, a feeling of peace and receptivity is created. [24](p. 192)

Infantilization is accomplished in the classroom by the instructor suggesting to the students that they have the child's ability to memorize and the child's curiosity for new information [25](Bancroft, 1975). This is also brought on by the Early Pleasant Learning Recall of SALT referred to later in this paper and by the frequent use of role-playing, games, songs and physical exercises.

[23]Bancroft, "Suggestology and Suggestopedia: The Theory of the Lozanov Method." ibid, 1976.
[24]Lozanov, Suggestology and Outlines of Suggestopaedy, ibid, 1978.
[25]W. Jane Bancroft, "The Lozanov Language Class," Toronto, 1975.

c) Double Planeness:

Double planeness refers to the fact that we receive information and communicate on both the verbal and non-verbal levels. There are numerous stimuli which basically go unnoticed or that we are not consciously aware of which affect our receptivity to learning. These include stimuli which come from the environment of the classroom (milieu), such as the decor and general appearance of the classroom, and from the teacher's personality, such as teacher's gestures, intonation, expression of enthusiasm, sincerity, and reflection of a dynamic personality. (Lozanov, 1978, Schuster, Bordon and Gritton, 1976, and Bancroft, 1976). How an instructor says his material is as important as what he says. What is also key is that both the verbal and non-verbal messages coincide and convey the same meaning. We are not always consciously aware of it, but many times negative reactions to a situation may be because we perceive at an unconscious level that someone does not really mean what they are saying, having picked up subtle messages through gestures, tone, facial expression, gait, etc.

d) Intonation:

Part of the double planeness is the tone of voice, or intonation of the instructor. When properly understood and used, the teacher can use intonation to create an atmosphere of authority (prestige) and contribute to the suggestive effect of speech, of what is being said. [26](Bancroft, 1976).

[26]Bancroft, ibid, 1976.

In his experiments, Lozanov found intonation improved memorization, not only when checked immediately, but especially when the check is delayed [27](Bancroft, 1976). In suggestopedia, not only are the phrases or words which are being learned repeated, but they are said in different tones of voice; sometimes the tone of voice will coincide with the underlying meaning of the words, sometimes not. Two different methods have been tested by Lozanov - one called "vertical intonational swing" where three different words or phrases are grouped together, each one being read with a different voice level. The other is the "horizontal intonational swing" where one word or phrase is repeated in the three different voice levels. The three different types of intonation are: 1) normal, declarative, promising; 2) quiet, soft, ambiguous (similar to what was previously mentioned in the "whispering method"), and 3) domineering, sure, finalizing as in a loud command (bold fashion). [28](Bancroft, 1976).

According to Schuster, Bordon and Gritton, 1976, this dynamic variation of intonation helps attract and keep the student's attention, as does varying the rate of presentation. (Sometimes presenting material slowly, moderately, rapidly and pausing at times). [29] In connection with rate of presentation is the next element, rhythm.

c) Rhythm:

This element refers to the use of animated conversational presentation during the active section of presentation in contrast

[27]Bancroft, "Suggestology and Suggestopedia: The Theory of the Lozanov Method, ibid, 1976.
[28]Bancroft, ibid, 1976.
[29]Schuster, Bordon and Gritton, ibid, 1976.

with the slower, measured tempo of presentation during the passive section during which certain musical selections of a particular rhythm are played in the background. Material is synchronized both with the students' breathing and with the background music. The suggestive atmosphere effect is enhanced, and both our physiological processes and mental life are greatly affected by rhythm. In interpreting Lozanov, Bancroft, (1976) states that "a continuous, monotonous, rhythmic presentation can engage the non-specific (or unconscious) mental activity and result in an easy overcoming of anti-suggestive barriers." (p. 44).[30] Lozanov has found in the psychotherapeutic setting that the rhythmical repetition of therapeutical suggestions "may bring about the hoped-for results more quickly than a single command or a solitary whispered suggestion." (Bancroft, 1976).[31]

This established rhythm has a positive influence on memorization, and the use of varying intonations helps prevent the boredom which would accompany repetitious rhythmical presentation of material. (Bancroft, 1976).

f) Concert Pseudopassivity:

This final element refers to the concept that receptivity to suggestion is enhanced by a passive state of mind. The more profoundly relaxed the learner is, the more suggestible he becomes and is then more open to a variety of suggestions. Passivity characterizes much of a suggestopaedic session, with the exception of when the students are role-playing, singing, etc. It is pseudopassive in that although the

[30]W. Jane Bancroft, "Suggestology and Suggestopedia: The Theory of the Lozanov Method", Unpublished document available through ERIC (Ed 132 857), 1976, 54 pages.
[31]Bancroft, ibid, 1976.

the students outwardly appear to be passive physically (particularly during the passive, seance section when the students are relaxing to the sound of music, and synchronizing their breathing to the presentation of material), their level of mental concentration is enhanced and increased. They are more able to memorize the material presented to them in the pseudopassive state. (Lozanov, 1971; Bancroft, 1975).

In his study of deep muscle relaxation, Lozanov found that relaxation facilitates memorization (Lozanov, 1971). This relaxation is brought about by deep breathing similar to Zen breathing exercises, and listening to the language material presented rhythmically in varying intonations over a background of Baroque music (the slower, largo movements). Students appear as if they are at a "concert" but are actually involved in considerable internal activity. (Lozanov, 1971). This has been verified by both the testing of memorization of material presented and by the recording of brain waves, pulse rate and blood pressure. Alpha waves increased, the pulse rate slowed down and the blood pressure decreased. Students showed no visible signs of fatigue, stress or strain (and this is after a very intense four hour class in foreign language). Questionnaires also showed that students reported improved mental and physical health as well as personal satisfaction with the courses. (Bancroft, 1976).

In summary, according to the material available from Lozanov, all six of the previously mentioned elements work together and are the means for developing creative, positive suggestive atmosphere and are the basis of suggestopedia.

How all of these elements function together in overcoming the anti-suggestive barriers so as to tap the reserves of the mind to accomplish accelerated learning, particularly hypermnesia, will be mentioned in an example of a "typical" language class in Bulgaria using the Lozanov method and an example of the American adaptation, Suggestive Accelerative Learning and Teaching (SALT).

EXAMPLE OF THE LOZANOV METHOD

The Lozanov Method in action in a typical class at the Research Institute of Suggestology in Sofia, Bulgaria, will be summarized. Foreign languages, particularly Western languages, have been the principle area of concern at the Institute, with more than 1,800 persons in a five year span (1970-1975) having taken language instruction.

Components and Physical Set-up

1) Maximum of twelve students per class, seated alternately male and female;
2) 30 class sessions, consisting of one four-hour class a day, six days a week for one month, with one break in the four hour session;
3) Expected attendance at every session after intially signing up;
4) Twelve specially constructed chairs arranged in a semi-circle for the students;
5) The instructor's chair placed at the head of the class;
6) Small foldout writing desks attached to each chair;
7) Reclinable chairs for the relaxation portion of the sessions;

8) Two loudspeakers for broadcasting of music which are located on the wall in front of the room;

9) A television set near one of the speakers for occasional viewing of language classes;

10) A stage area used for the performance of simple plays;

11) A courtyard outside the Institute building where students do physical exercise. (Bancroft, 1975).

Consistent with the importance attached to the environment and peripheral stimuli in Society psychology, rooms are decorated pleasantly and cheerfully and the lighting is soft and unobtrusive. Teachers are trained to understand the subtle nuances of acting and psychology so that they can suggest the meaning of new foreign words through the use of gesture and intonation and can inspire the students to learn.

Class Sessions - Three Phases

Actual class sessions are divided into three parts (called the "suggestopedia cycle") for the four hour period - the review of previously learned material, presentation of new material and the seance consisting of two divisions.

a) Review:

During the review section, material previously learned is reviewed through the use of conversations which go on between the teacher and student and between students (Bancroft, 1975, reports from first-hand experience through observation in Sofia that the conversations are very animated.) Games, sketches, and plays are also used for review (as opposed to the traditional language laboratories, rigid structoral

exercises and drilling of language patterns). To help the students become less inhibited about the use of the new language, they are given new names and fictitious biographies. Part of the idea is that when a student makes an error, it is an error made by the person they are pretending to be! It also encourages the students to get into a more playful, pretending, childlike mood which helps overcome the critical-logical anti-suggestive barrier, and satisfied the need for infantilization.

b) Presentation of New Material:

The new material is presented in the fairly traditional form of realistic dialogues and situations involving various necessary grammar and translation. It is conducted in the new foreign language, with the exception of the grammar and translation. New material involves dialogues and situations familiar to the students, starting initially by describing what he sees around him. Memorization is increased when the material used is emotionally relevant and interesting. Content includes material which they will probably need to use in their respective professions.

c) Seance - Practice Phase:

The last section, the so-called seance, (the French meaning of a sitting, not the communication with spirits as we interpret the term!) involves the presentation of the material in two ways. First the language dialogues are presented in varying intonations and rhythms, coordinating the sound and printed word or illustration, similar to or reminiscent of our television commercials or Sesame Street.

The second time the material is repeated, it is acted out by the instructor over a background of appropriate calm, pleasant music. During all of this last section, the seance, the students are reclining in their chairs and doing deep breathing which has been adapted from the relaxation techniques of the Savasana Yoga.

The seance is used for reinforcement or memorization in a physically and mentally relaxing (reclining chairs, correct yoga breathing to a precise count of eight - two seconds' inhalation; four seconds' breathing retention; two seconds' exhalation.) While in the active stage of the seance, students read along silently material on the printed page which the instructor is simultaneously presenting. Material is written in groups of three phrases, each phrase being presented in one of three intonations or voice levels (normal, whisper, loud). In studies, it was found that concentration in the form of holding one's breath while the material is being presented helps in learning. Also, Soviet linguistics contend that inner speech, or inner repetition is of considerable importance in the memorization of difficult foreign words. (See references in Bancroft, 1978, Lozanov and American Adaptation). Following this section, students listen to the material being presented a second time, this time with background music of the Baroque era, starting with an introduction, the slow concerti grossi of 18th Century Baroque (60 beats to the minute in 2/4 or 4/4 time) followed by a fast cheerful flute section designed to bring the students out of their deeply relaxed state which they've been maintaining during

this concert, passive section of the practice phase. This time intonation is to match the meaning of the material being presented and students are to mentally reinact the scene evoked by the spoken material. (Later, the fast section was deleted.)

SALT - AMERICAN ADAPTATION

For a variety of reasons, the Lozanov method had had to be adapted to fit the American system of education, both philosophically and simply around use of time. Many of the elements remain, and the three most important ones are identified as : 1) an attractive classroom with a pleasant classroom atmosphere; 2) a teacher with a dynamic personality who has the ability to act out the material and positively motivate the students to learn; and 3) a state of relaxed alertness in the students. This last part is achieved by such things as physical exercises for relieving body tension; mind calming exercises; deep, rhythmic breathing for improved concentration; and the rhythmic presentation of material over a background of Baroque music. (See Appendix A).

Structural Differences

Rather than the four-hour, 30 days of class, sessions generally last the standard American one-hour learning period; the seance part has been modified to where the material is read in three distinct intonations over the Baroque music (eliminating two sections of music presentation); classes exceed the ideal twelve; standard desks and chairs are used as opposed to reclining chairs (although in Jean Taylor's room,

the children have a choice of taking the concert pseudopassive phase on the carpeted floor, lying on a sofa or one of two beds arranged in the "house" area of her classroom); autogenic relaxation exercises are used for relaxing various parts of the body (accompanied by deep, rhythmic breathing) and the deep breathing is more often done to four seconds' inhalation and four seconds' exhalation with students holding their breath while the teacher is presenting the material (as Don Schuster said:

> while the children are holding their breath, they are able to pay attention to your talking, they are narrowing and focusing their attention and are probably thinking, at least when he stops talking, I can breath again[32] (Madison notes, 1980).

Also different is that the mental relaxation exercises are done at the beginning of the session along with positive suggestions for pleasant learning as opposed to the relaxation section being at the very end of the four-hour class as in Bulgaria. It is assumed that this change will improve their powers of concentration and motivate them to learn.

Suggestive Positive Atmosphere

A suggestive positive atmosphere is established through both verbal and non-verbal communication. Students engage in a number of physical relaxation exercises, do one of three mind-calming exercises, followed by the recall of an early pleasant learning experience from the past. After these physically and mentally relaxing exercises, students are then presented with the class material to be learned that day.

Part of establishing the needed suggestive positive atmosphere is done with the circumvention of the desuggestive

[32]Donald Schuster, Informal presentation made to a group of interested teachers and psychologists in Madison, Wisconsin, February 29, 1980.

(or anti-suggestive) barriers, as previously mentioned. Another additional tool is the use of suggestions to "try hard", which help to motivate the students and lead them to expect that they will be successful (Schuster, Bordon and Gritton, 1976, p. 17).

A third tool is to let the students know that they will be expected to take a short quiz or be checked on the material which they are just about to be introduced to. The quiz is only for them, and they can decide if they want the teacher to see their score. Quizzes are not graded, and the student only needs to show the quiz to the instructor if he/she wants to. It's been found that "students simply do better when they know that they will be tested or checked on the material they are about to learn."[33](Schuster, Bordon, Gritton, 1976, p. 17). Periodic exams and the final class are used for grading purposes.

Lesson Plans

In planning the lessons, four elements are emphasized in the teaching manual (Schuster, Bordon, Gritton, 1976). They are: 1) objectives for each lesson - that the students understand the oral and written material presented, that they use this material both orally and in writing, and that the student is motivated to want to learn the material because the teacher has presented it in an integrated and interesting fashion; 2) presentation style - presenting material orally with a flair; using a ceremony around receiving their texts; practicing learned

[3] Schuster, Bordon and Gritton, ibid, 1976.

material in a local ethnic bar; using Latin American background music in the Spanish class, etc.; 3) unit content - each lesson is based around global themes of a larger scope, the last lesson culminating in a final class play or psychodrama which involves showing off all that's been learned in the global theme; and 4) an awareness and use of a variety of music in the Baroque period.

Three Phases

As in the Lozanov method, there are three distinct parts to the "suggestopedic cycle" of the American adaptation: the review, the active and passive presentation sections, and the practice phase.

a) Review:

The review section is used to go over previous lesson material but in a different style than previously presented. Games, skits or sketches or plays done in the target language for the language classes are typical methods for review. If and when errors are made, the instructor corrects them in a supportive, positive fashion, such as 1) suggesting in a mild tone of voice the correct use without calling specific attention to the person having made the error, 2) ignoring it, 3) using the material correctly in a different context later on. Also, the frequent control quizzes can be used directly by the students to self-correct.

b) Active Presentation:

In language classes, the active phase is characterized by an enthusiastic and dramatic presentation of material by

the teacher who not only uses the three intonations mentioned earlier, but also varies the rhythm of presentation. Gestures and facial expressions are especially useful in getting across the emotional experience of the material.

The instructor also suggests visual and auditory images and associates based on a likely synonym or common meaning and a visual image to go with the synonym. This is the use of what's called the "acoustic link." An example would be to see the author (Phyllis Brownlee) with a bag full of brown leaves.

A third instruction given to students to help in the memorization of the newly presented material is to suggest that they experience the material in all senses or modalities, thus activating the use of the right hemisphere. "Experience the words fully, see them, hear them. Project yourself into the words, be them, imagine them, taste them, feel them. Experience the words as fully as you can."[34] (Schuster, Bordon and Gritton, 1976, p. 39).

c) Passive Presentation:

The second part of the second phase, the passive, concert-like phase, is characterized by presentation of the previously actively presented material. This time the studonts are pleasantly relaxed, breathing deeply, listening to calm, pleasant music of the Baroque period. The instructor is trained to time the presentation of the material

[34] Schuster, Bordon and Gritton, ibid, 1976.

in such a way as to synchronize it with not only the students' breathing, but also with the rhythm of the music. Before doing this, students are guided through an exercise, a mind-calming exercise, to calm them from the active stage just completed. Bordon and Schuster (1976) did a complex statistical analysis which measured the effect of these three factors separately and in various combinations: (a) the suggestive climate, (b) music, and (c) synchronized breathing. Findings revealed that each of the factors significantly affected the learning, each individually and also collectively.

d) Practice:

The last phase, practice, because of the time span being different from the original Lozanov method, is generally done on alternate days from the presentation of the material. Practice can take many different forms. It may be simply the acting out of various skits, similar to the review stage, or the playing of various games. Psychodramas are used for the final class play in which everyone takes part, both in deciding on content, writing or practicing the script, and acting it out. Control quizzes are used to practice previously learned material. These are not graded by the instructor, and are only seen by the teacher if the student so desires it. Different kinds of quizzes are mentioned in Schuster, Bordon and Gritton (1976), as well as a typical final exam consisting of five different parts, testing both written and oral comprehension of the lessons.

CHAPTER III - APPLICATION OF SUGGESTOPEDIA TO LEARNING DISABLED CHILDREN

INTRODUCTION

At this point, the reader may be wondering what all this about suggestology has to do with the whole area of educating children with learning disabilities. In her research, and in talking with people who are also investigating suggestology, many of the components are directly applicable to work with children with learning disabilities. These are specifically, physical relaxation, mental relaxation, developing the ability to concentrate for periods of time, visualizing and using images, learning to modify one's behavior, reducing negative feelings about one's self, developing more positive feeling about one's abilities, counteracting the numerous negative messages from the past about one's learning potential. ("You're a dummy, you'll never learn to read." "See I told you it would be hard." "You're going to have to work the hardest you possibly can just to stay a year behind everyone else.")

Many of the children diagnosed as "learning disabled" are labeled that on the basis of a number of observable behaviors as well as quantified measures of intelligence, abilities, strengths, and deficits. Some of the more obvious are: 1) short attention span, easily distracted, doesn't finish tasks; 2) hyperactive, hyperkinetic, always on the go physically (and presumably mentally); 3) deficits in auditory and visual areas either in the receptive, associative

or expressive modes; 4) lowered self-concept; 5) academically retarded at least two years behind chronological age; 6) average or above average intelligence; 7) discrepancies on the verbal and performance subsections of the WISC of at least 20 points; 8) poor memory. (See definitions).

Each of the eight areas mentioned is addressed in some fashion in the method known as the Lozanov method, or Suggestive-Accelerative Learning and Teaching, The American adaptation of the Lozanov method. Some or all of the techniques have been used with "normal" children, others with the learning disabled in a variety of projects, individual teachers' attempts to find something that worked, as well as controlled experiments which were part of someone's master's or doctoral work. This chapter and the next will be devoted to exploring the variety of studies which have been done, their effectiveness and what this says about our education of children with learning disabilities.

Chapter V will be devoted then to studies of various components. The author contends that some children are actually what she calls "decisionally disabled", deciding at a very young age, and mostly unconsciously, that they are incapable of performing as well as other children. Sometimes this view is reinforced and supported later on by parents, teachers, peers, or the child herself as she measures her successes or failures against those around her and against the expectations made of her either by herself, her parents or her teachers. Sometimes this view is even

initiated by parents or teachers by such comments as "Oh, you're just like your dad - he can't spell either." "Your sister couldn't read either.")

BARRIERS REVISITED

The three anti-suggestion barriers speak well to the child who would be classified as "decisionally disabled."

> If an educational system succeeds in liberating the pupil from fear and from the routine social suggestive norm of his limited powers and is brought into line with psychophysiology, it will easily achieve its other pedagogical aims. But the difficulty arises not so much from considering how to bring about the initial liberation, but how to create a system of sustained, continuous inner liberation. The pupil's confidence in his or her own capacities for learning should grow constantly and in this way instruction gradually develops into self-instruction. [1](Lozanov, 1978, in Pollack, 1979, p. 27).

Pritchard (Winter, 1978) says very well the dilemma a learning disabled child is in when confronted with suggestions that learning is fun, easy and that he will learn more, faster and better than he has ever before. Each of the three barriers mentioned earlier - the logical/critical; the intuitive/emotional, and the ethical/moral all have separate but specific protective roles.

Logical/Critical

According to Pritchard (Winter, 1978), an example of the logical-critical would be that if a remedial reading teacher

[1]Lozanov, Suggestology and Outlines of Suggestopaedy, 1978, in Cecelia Pollack, "Suggestology and Suggestopedia Revisited." Journal of S.A.L.T., 4(1), Spring, 1979, pp. 16-31.

says to her class that they are great readers, chances are that the students, in appraising the situation, will think "Now wait a minute-if I'm so great, what am I doing here in this class while the rest of the kids in school are doing other lessons?" thereby rejecting the teacher's suggestion on the grounds of simple logic!

Intuitive/Emotional

In the case of the intuitive/emotional barrier, the one which rejects suggestions which threaten confidence and emotional security, it is generally working overtime in the school setting. Most school situations which the learning disabled child finds himself in are anything but related to relaxed, comfortable and happy environments where one is emotionally secure and feels no threat to one's confidence. How many times in a day does the learning disabled child try something only to find out that he/she can't do it like other children, or like he/she would like to be able to do it. What's fascinating about this barrier is that once the student finds himself succeeding, no longer failing as in the past, he has a hard time believing that he really succeeded! An example of this is what Gritton (in Schuster, Bordon and Gritton, 1976) describes of a so-called learning disabled student who actually erased a correct answer to make it incorrect. Being successful at school learning tasks would create feelings with which he was not accustomed to dealing!

Ethical/Moral

The third barrier, the ethical/moral, operates when it is suggested that learning is easy and fun, contrary to the protestant work ethic, that learning is supposed to be hard work. Some students may not even consider it "fair" to actually put in less effort and get better results! (Pritchard, 1978). Some may even feel that if they don't have to work hard at learning something, then it must not be of any value after all!

SPECIAL CONSIDERATIONS

Introduction

Failure, frustration, anxiety, hyperactivity, emotional difficulties, cognitive change, attitude change, the unconscious mental processes, and the use of imagery in facilitation memory are all areas discussed by Nelson (1980) in her study of the use of suggestology with a group of learning disabled children. In general, failure and the subsequent frustration, loss of self-esteem and lowered self-concept are familiar to those who work closely with children with learning disabilities. Not only is the child affected and concerned but so are his or her parents and teachers. Learning disabilities teachers continue to explore ways in which the frustration and anxiety brought on by continuing failure can be alleviated. In Hammill and Bartel (1971), the authors felt that the associated emotional difficulties which are found in children with learning disabilities are a "given" fact.

Although this is not disagreed, there are many questions as to which came first, the reading difficulty or the emotional difficulty. In Quadfasel and Goodglass (1968), it is noted that it is almost inevitable that, at least in this culture, a child with a severe reading handicap will develop an emotional disturbance. Most educators would contend that the emotional disturbance and its effect on the student's performance is primary. Complicated by this is the fact that certain traits are shared by both children whose primary disfunction is learning originated and those whose primary disfunction is emotionally originated, such as anxiety, fear, various maladaptive behaviors, and self-concept.

Anxiety, Fear

a) Theory:

In the observation of some (Klasen, 1972), "psychological difficulties increased in direct proportion to the duration of unrecognized and untreated learning problems and that psychologically caused dyslexia is extremely rare."[2] (p. 3) Connolly (1971) states that anxiety is a characteristic found in the learning disabled population with great frequency. A very good definition of this kind of anxiety, especially as seen in the learning disabled population, is that "anxiety is defined as a primary response of an organism frustrated by its own incapacities and by the inadequate efforts made to meet its needs."[3] (Bender, 1956).

[2] E. Klasen, The Syndrome of Specific Dyslexia, Baltimore: University Park Press, 1972.
[3] L. Bender, Psychopathology of Children with Organic Brain Disorders, Springfield: Charles L. Thomas, 1956.

Herr (1978) also points to anxiety over grades, shyness when called on to respond orally, as well as the older student's awareness of such concerns as national and global economy and social and environmental problems. All are sources of anxiety.

Telling a student that a subject is going to be hard, but...is a direct suggestion which may have a negative impact and set up a learning barrier. Herr suggests instead of the teacher saying that something is going to be hard or that "don't worry if you make a mistake", that the teacher can suggest that less than perfect student performance is acceptable and normal, thereby circumventing the need to become anxious and all the subsequent and component behaviors which come with anxiety.

Many are familiar with Holt (1964) and his views that there is a large amount of fear associated with the school experience. In the learning disabled child, this fear translates to fear of failure, fear of disappointing one's teachers and parents, fear of ridicule from teachers and peers, and inability to compete adequately with one's peers.

b) Related Research:

Learning anxiety and its affects on learning have been studied along with research on the effects of relaxation in connection with anxiety and task difficulty. (McKeachie, 1974; Sarason, 1972; Straughn and Defort, 1969; and Cheney and Andreason, 1972). More anxious students seem to learn familiar material better than less anxious students under stress, except that the more difficult the materials become

the better the performance of the less anxious students in a non-stressful condition (McKeachie, 1974). Straughn and Defort (1969) found relaxation had a greater effect on the learning of high difficulty words than low difficulty and that relaxation prior to learning was superior to relaxation just prior to recall, both being more effective than no relaxation, tension and neuromuscular control in mental performance. Cheney and Andreasen (1972) found that subjects who were taught progressive relaxation techniques in order to control neuromuscular tension performed significantly better on the final test than did the controls. (See Schuster, Bordon and Gritton, 1976).

Two studies of importance to the area of learning disabilities are those of Cheney and Andreason (1972) and Perebom (1977). Both showed that physical relaxation or periods of relaxation therapy aided in the improvement of behavior (Perebom) and performance of a random numbers recall test (Cheney and Andreason, 1972). Physical relaxation techniques go back some time. Relaxation has an extensive history in medicine, psychology, psychiatry and education. Jacobson, as early as the 1930's, developed a technique of progressive muscle relaxation which was based on the theory that thoughts and feelings were actually located in the peripheral musculature.

Nelson (1980), points out that much of the current research on the use of relaxation with children with learning problems has been geared toward behavioral improvement, whereas the use of relaxation in the suggestopaedic approach is

toward accelerated learning and the psychophysiological benefits. Many of these studies are discussed in more detail in Chapters V, VI and VII.

Avoidance Behaviors, Defense Mechanisms

As in any other properly functioning organism, anxiety becomes the source of avoidance behavior and helps set the stage for the development of a whole repertoire of defense mechanisms. Connolly (1971) finds that a child with learning disabilities compounds his situation by the establishment of defenses which serve in effect to help the child account for his failures. ("I can't read because I can't sit still.")

a) Cognitive Change:

A number of things change through this adaptive or maladaptive behavior, these defenses to avoid anxiety. One of these changes is on the cognitive level. A child who exhibits a learning disability may eventually define himself as being inferior and slow and continue, based on that new, though inaccurate, perception, long past the time when his disability is an important factor in his functioning. (Nelson, 1980).

b) Attitudinal Change:

Another change is in the area of attitude. A child who continues to experience frustration and failure at particular learning tasks will begin to develop very intense negative feelings toward that particular task and to school or anything which smacks of school in general. Eventually

the student decides there is probably no use in trying because he is going to fail anyway. Working with both the cognitive and attitude changes is a difficult task for the special teacher. The anti-suggestive barriers of suggestology are working overtime with these children, and more care and time is necessary to help them experience the fun and ease in learning which is possible with the use of suggestopedia.

In connection with the before-mentioned information on avoidance techniques, Held (1976) in his study with disabled readers found that three techniques were effective in overcoming the avoidance behaviors - mind-calming, imagery and positive suggestion. In Schuster, Bordon and Gritton (1976), a combination of physical relaxation, mind-calming exercises and recalling an early pleasant learning experience were a successful combination in helping students learn material more efficiently.

Self-Concept and Belief Systems

Another area so key to working with children with learning disabilities is the area of self-concept. As mentioned before, the learning disabled child who finds herself in a setting where she is unable to perform or compete with her peers is likely to feel frustration and anxiety. Since the human organism feels anxiety as a negative emotional state, the child soon develops certain problems (stomach aches, headaches, inattentiveness, restlessness, clowning, disruptive behavior, etc.) Along with this, and key to the use of suggestology is the area of altered beliefs and feelings.

The child oftentimes no longer feels good about himself, believes that in fact he must be a dummy and then starts to behave on that "belief" and continues to behave in a fashion to support that belief. Being able to excel at learning is antithical to this belief and that's where the area of the anti-suggestive barriers comes into play. The barriers are best dealt with, or circumvented by a positive, supportive atmosphere in the classroom as mentioned before by acknowledging and using the six elements - authority, infantilization, double-planeness, intonation, rhythm, and the passive pseudo state.

Lozanov theorizes that our belief systems are formed from suggestive factors received on unconscious levels from the environment and within the communication process (Nelson, 1980). If that is the case we can use that mechanism to our advantage. Rearrangement of the environment, awareness of the unconscious, subtle peripheral messages we are giving as teachers both overtly and on the non-verbal level are all things we as teachers need to be more aware of and specifically trained in using in a constructive manner.

CHAPTER IV - SPECIFIC CASES IN THE APPLICATIONS OF SALT TO LEARNING DISABILITIES

As a result of intellectual curiosity, personal philosophy and particular teacher job placement, a small number of dedicated teachers have experimented with the use of SALT techniques with the special population learning disabled. These studies, results and conclusions follow.

TUTORING - CHARLES GRITTON

In his early investigation of the Lozanov method, Charles Gritton (Schuster, Bordon and Gritton, 1976) had the opportunity to use the method with two eighth grade students in a four-day tutoring session. Both students were identified by their parents as learning disabled and having particular difficulty in math. Spelling was also identified by the students themselves as an area of difficulty. In his subjective account of what happened in those four days, Gritton tells of how, initially, the two students were willing to take their pretest on spelling, but absolutely refused to even try the mathematics because they saw it as being beyond their expectations of themselves. Within four days they were not only doing well on the list of 200 spelling demons, checking their own papers, making comments such as "It's fun to learn, it's easy to learn, there's nothing to learning." (p. 2) but they were even teaching each other in mathematics. They were remembering the various rules previously taught them in class, applying them correctly, and took off on their own each day showing each other they knew what to do, quite

to the amazement of the teacher who was prepared to review the rules with them! An interesting note, having to do with the anti-suggestive barriers method mentioned earlier is that the boy in this study continued to keep erasing correct spelling words, changing them so they would be wrong - affirming in his mind that he could not spell even though he did know how to spell the words correctly after the Lozanov style presentation. After the four days, Gritton stopped the tutoring sessions:

> after I had this chance to apply and see the amazing effect the Lozanov approach can have when you desuggest the student, encourage him and raise his expectation level. (p. 4)[1]

Initially, these were two students who were uninterested in school, unable to work fractions, unable to work percentage problems, and unable to spell. Objectively, their scores were the following:

Jane - Spelling: 30, 90, 100, 100% Fractions: 0, 90, 100, 80%

Joe - Spelling: 20, 90, 60, 60% Fractions: 0, 90, 90, 90%

In those four days, with a three hour a day session, each student went up two grade levels in four days and currently both are in the area junior college and finished in the top half of their graduating high school class! (Schuster, 1980, Madison).

NINTH GRADE READING AND MATHEMATICS - SCHUSTER AND VINCENT

Schuster, in his study with Vincent (1977) of the effect of the Lozanov method (SALT) in teaching mathematics and reading

[1]Schuster, Bordon and Gritton, ibid, 1976.

to learning disabled low socioeconomic ninth grade students found significant practical improvement from pretest to post-test in both the Key Math and Woodcock Reading tests. This experimental class also exhibited practical improvement in the Brooks Student Questionnaire (BSQ), a student-teacher affective relations score. Average gain on the Key Math was 1.4 years; on the Woodcock Reading, the average gain was 2.2 years. This is compared with what most learning disabilities teachers will say that a teacher is doing well to have her students progress a year academically for a year physically spent in the classroom (Schuster and Vincent, 1977). The SALT method was used only one-tenth of the time in the classroom by a teacher who was trained in a 120 hour summer workshop.

Teacher comments about the SALT program were that it was interesting, relaxed, and a fun way to get students on their way to learning. The students felt special because of special tapes made for them personally by the teacher. Problems encountered were that the children in the resource rooms where this study was being done were too different from each other, in terms of age, skill level and emotional personal needs; some had rather severe learning problems, possibly compounded by drug use or abuse; that outside iterruptions caused problems; and that follow through as far as visits and planned help did not come through (Schuster and Vincent, 1977).

FOURTH GRADE MULTIPLICATION - SHULTZ

Another study was done by R. A. Shultz (1978), in which the researcher evaluated the SALT method in teaching multiplication

to fourth grade children with learning problems. At the end of the experiment the four SALT-taught children exhibited significant ($p > .5$) time improvement from pretest to post-test in a criterion-referenced math test.

OBSERVATIONS, TUTORING - POLLACK

Bulgarian Classroom Observation

Cecelia Pollack, Ph.D. of Lehman College in New York had the fortune of visiting classrooms in Bulgaria where children were being taught via the Lozanov method. What she found were children who were excited as they were involved in the learning process and solving problems far beyond what is traditionally expected of children of their age level. (Pollack, 1976). In her visits, she found eagerness and involvement on the part of the children and teachers and began to wonder about school failures and about those children who learned more slowly than others. What she found has something to say about our own ideas of labeling children, having certain expectations of some children and different sets of expectations for others. In inquiring about where the slow kids were, she was told that the educators do not believe that intelligence is either innate or centrally controlled and, as a result of that belief, they do not use either IQ tests or standardized tests for tracking children into ability groups. Instead, certain curriculum standards are set for each grade and promotion occurs upon completion of attaining those standards. For the child who learns at a slower rate, special language teachers or "logopeds" are

called in to help in special cases; while other children are helped with supervised homework and individualized remediation. This all occurs during the afternoon session, from 1:00 p.m. to 4:00 p.m., when the schedule is more flexible to incorporate a variety of extra-curricular activities in the arts, sciences and craft skills. The concern of the school is:

> to raise the level of the slow child to meet grade standards by extra individual attention at the first indication of his lagging behind. The strong support he receives prevents his failing. (p. 96)[2]

Even after a rough first four years, the principal at the school visited by Dr. Pollack reported that all grades had completed two years of curricula in four months. At this point, there are 17 schools using the Lozanov method in their subject matter, not just in foreign language, where the technique was originally developed. In Pollack's words:

> For educators, the implications of Lozanov's experiment are prodigious. If the results are substantiated as the experiment is broadened, Lozanov will have attained a break-through in education. He will have pointed the way toward educational possibilities leading to the enhancement of knowledge and the enrichment of the human personality far beyond what we now consider possible. (p. 99)[3]

Application in Learning Disabilities - Randy and Spelling

As a result of her visits to Bulgaria and study of the Lozanov method, Pollack decided to employ it with dyslexic

[2]Cecelia Pollack, "Educational Experiment: Therapeutic Pedagogy." Journal of S.A.L.T., Vol. 1, No. 2, Summer, 1976.
[3]Pollack, ibid

children. Based on her experience in diagnosing and remediating such children over the years and, as well as observations, she found that a large percentage of them appeared to intuitively turn toward activities associated with the right hemisphere. "Their vivid imagination, so counter-productive in a traditional classroom, might be the key to learning the structure of language another way - the suggestopedic way. Could their tendancy to day-dreaming be put to good use in a relaxing situation?" [4](Pollack, 1980, p. 9).

Her first subject was Randy, a ten-year old boy who was diagnosed as having a specific language disability who had very poor retention for spelling words, especially those with irregular sound-symbol relationship. In her description of her work with Randy, Pollack, (1980) refers to a personalized "guided imagery" script which was full of positive motivational suggestions, relaxation, appropriate music background and 20 words he had misspelled on a pretest.

Randy's task was to sit comfortably in a reclining chair with his eyes closed, listening to music. During this time he was to imagine himself vividly in a situation described in the script and see himself trace each of the twenty words on the beach sand with a "magic" pencil he had found. Upon completion of this task, Randy was retested on the twenty words; and to the astonishment of both teacher and student, he spelled 18 out of 20 correctly! On a re-test given one week later, he retained his score with no practice during the week. His comments after the imagining task were "Boy, that felt good!" (Pollack, 1980, p. 9).

[4]Pollack, "Education of the Whole Brain: Suggestopedia, ibid, 1980.

Continuing Developments and Materials

On the heels of her success with Randy, Pollack began employing elements of Suggestopedia with other dyslexic children, tailoring the guided imagery to suit the particular concept to be taught or material to be memorized. In her words, "I grew to expect the successful results I was getting. This was important, for teacher expectations of successful learning are crucial to the system." (p. 10)[5]. In her own enthusiasm and exploration for appropriate teaching materials, Pollack began writing lyrics about the "Sounding Alphabet" to go with her Phonic Readiness Kit of little objects (Pollack, 1969). In collaboration with a musician friend, the two set the lyrics to music and have had it published by Folkways' Records this past year. (See Glick and Pollack, 1979)

Following that came a script teaching word anaylsis with prefixes, stems and suffixes; humorous motivational introductions to phonic lessons; a system of creative phonics which made a game of writing silly stories containing pre-taught phonograms. Her current project is a script to teach English to Hispanic kindergarten children in 30 days through music, art and dance.

In her closing remarks, to her audience at an Orton Society lecture, Pollack aptly states that "Suggestopedia owes its value to being a creative process that harnesses human energy through music, art, poetry and the best and most humanistic aspects of our culture, for the purpose of realizing new and expanded levels of human potential." (p. 11)[6].

[5]Pollack, "Education of the Whole Brain: Suggestopedia, ibid, 1980.
[6]Pollack, ibid.

RETENTION OF UNKNOWN WORDS - NELSON

Design

In a recent study, Nelson (1980) researched the question: For 6 to 8-year old learning disabled children, is there a difference between the effectiveness of the Lozanov approach versus the traditional approach in facilitating retention of unknown words? Independent variables were sex, reading level, age, relaxation response of the treatment subjects; and sex, reading level and age of the students in the contrast group. Specific objectives were to investigate the effects of the following independent variables on word retention: (a) the treatment combination of mind-calming, (b) imagery and non-attentive learning versus the traditional approach in relation to sex, (c) reading level, (d) age, and (e) relaxation response. Dependent variables were the number of words correctly remembered from a list of 20 words as tested immediately after learning, at the end of the four session experimental phase, and as tested eight days after the conclusion of the experimental phase for delayed retention.

This study was exploratory and speculative, with A Behavior Analysis (ABA) design being used to determine the conditions under which the method is effective or ineffective and which, if any, of the independent variables contribute to its effectiveness or ineffectiveness; in other words, "what specific treatment is effective with a specific subject under what circumstances?"

The two objectives of the Lozanov approach which were emphasized in this study were (a) attempting to create a

relaxed learning atmosphere by using short relaxation and mind-calming exercises, the expectation being to minimize the external and internal distractions to learning, and (b) presenting lesson material in both attentive and non-attentive states thereby reaching different awareness levels that reportedly contribute to greater learning and retention. In the attentive active part of the presentation, new words were presented on flashcards and both imagery and kinesthetic techniques were employed. In the passive, or non-attentive session, words were again presented with intonation as the students relaxed to a specifically selected musical background. Practice sessions consisted of the use of the words in the format of a variety of games.

Students in the contrast group were not given any relaxation or mind-calming exercises, nor were either imagery or music used.

Results, Limitations and Conclusions

> Results indicate that the students who could achieve a good relaxation response attained good in-course measurements and reached significant immediate and delayed retention measurements on the criterion material. (p. 118)
> Significant scores on daily, end of treatment and delayed evaluations were attained by all but one of the students given the Lozanov treatment approach. ... While the contrast students achieved two or three significant in-course measurements, these were not reflected in their end of treatment or delayed retention evaluations. (p. 126)[7]

Males who were the oldest students, in the lower reading levels who attained the best relaxation response, had the best results overall.

[7]Nelson, ibid, 1980.

Some of the limitations and problems of Nelson's (1980) study as she states are that there was a small number of students (N=12), the failure of some to receive full treatment and measurement, limited to using treatment session on alternate days rather than consecutive, and the lack of more extended experimentation to check the results of the approach over time.

Nelson (1980) concludes that the uniqueness of the approach is that Lozanov brought together many individual elements already known to Western disciplines (although many have either been ignored or not applied to the field of education), in a unified holistic functional methodology that can be implemented in the educational field.

REMEDIAL READING CLASS
PRICHARD AND TAYLOR

One of the more extensive studies, with exceptional children, which is still currently going on (the methods studied are still being used with a similar population) is the one conducted by Jean Taylor, a remedial reading teacher in an elementary school outside Atlanta and Allyn Prichard, a school psychologist. Both are actively involved in the study and use of suggestopedia and its adaptation to the American classroom and environment.

Design

Each school year is divided into two 18-week sections. The first week of each section is devoted to pre-testing, the second week to pre-instructional training in SALT readiness activities (this consists of students being taught a physical

relaxation technique consisting of deep breathing followed by teacher suggestions for progressive relaxation of various body parts according to the Wolpe method (See Appendix and tape).

Students were then given visualization practice, learning use of five different exercises, varying in difficulty. They were (1) visualizing colored walls, (2) visualizing and tasting fruit, (3) visualizing and feeling various textures (wood, velvet, etc.), (4) going on a visualization tour of the classroom, and (5) taking an imagined raft trip down the Chattahoochee River (Prichard, Taylor, 1978).

Students were then instructed for 15 weeks using a variety of techniques in two-day cycles using the Getting the Facts material from Barnell-Loft (main emphasis of the study was to test reading comprehension). Post-testing concluded during the last of the 18 weeks, using the Spache Informal Diagnostic Reading test previously and currently the Stanford Diagnostic Reading test.

Grouping was done on the basis of Standford Comprehension subtest scores, age, psychological compatibility and IQ. Class size range from two to five, with four being the most workable for 45 minute sessions at least twice a week, generally on alternating days.

Suggestopedia Cycle

a) Day 1:

Students are involved in preparation, presentation and practice stages. The first day of the two-day cycle starts with a phonics game, the skill to be studied predetermined by

the results of the Phonics subtest scores on the previously mentioned pre-test. New vocabulary is then presented using both contextual clues and kinesthetic methods (trace the word with brightly colored felt-tipped markers, put it in the sentence, read it or listen to it being read). Students then act out a teacher-prepared play which is based on the vocabulary and content of one of the Barnell-Loft lessons being studied. Students then become involved in the passive stage, lying down on the rug or sofa or bed in the "house" section of the classroom and begin deep breathing to the beat of a metronome. They then go on a fantasy trip (teacher-guided imagery exercise, mind-calming effect) using a story theme made up by the teacher. This is then followed by extensive positive suggestions of worthiness and uniqueness of each class member. They are then instructed to see a "magic drawing board" on which they will imagine writing their vocabulary material. The material is then read by the teacher over a Baroque music background using the previously mentioned rhythm and intonation variations (normal, soft, loud). Breathing is coordinated with the music. This passive stage is concluded with suggestions for general academic health and excellence. (Prichard and Taylor, 1978). Day 1 is concluded with an oral check of the day's vocabulary list.

b) Day 2:

The second session starts again with a phonics game picked by the same procedure as Day 1. The teacher then reviews the word list; and the students then do as in Day 1, relaxing, visualizing, listening to the positive suggestions. Material

presented the second day is the complete story directly from the Barnell-Loft material, using the 4/4 rhythm. Intonation is varied and coordinated with the breathing. This time it is read with appropriate expression for the content. Vocabulary is then again presented as in Day 1, followed by suggestions for general academic excellence and health. Students then read the story orally after which the teacher uses questions from the Barnell-Loft series to check for comprehension. Students then chart their progress.

Results

Results from the formal experiment using the above methods and techniques indicate that in the 15 weeks of instruction, average gains were that 80% of the students gained a year or more on the Spache oral reading subject; and 75% made a gain of a year or more on the Spache silent reading subject during the same time.

When analyzed on the basis of the degree to which the students achieved and maintained a relaxed state (as indicated by the observable criteria of eye closure and minimal body movement), it was found that those exhibiting excellent relaxation performed the best (made the most gains).

> These data further underscore the strong results obtained for those students who could 'let go' and (presumably) visualize the lesson material as it was read to them in a deeply relaxed state. (Prichard and Taylor, 1976, 1/2)[8]

[8]Allyn Prichard and Jean Taylor, "Adapting the Lozanov Method for Remedial Reading Instruction." The Journal of S.A.L.T., Vol. 1, No. 2, pp. 107-115, Summer, 1976.

Conclusions

Taylor and Prichard (Winter, 1978) conclude that teaching sight word vocabulary through fully explored context (paper and pencil tasks, dramatization and altered-states visualization) in a strongly positive suggestive atmosphere appears to greatly improve children's scoring on the Spache Oral and Silent Reading subtests. It appears to have a lesser effect on tasks such as learning nouns in isolation as measued by the Spache Word Recognition subtest, probably because the vocabulary words tested by the Spache word recognition were generally not those selected from the Barnell-Loft material used in class. The Spache consists primarily of nouns, not of basic sight words as in the Dolch and Barnell-Loft materials.

Two basic components of the Lozanov method were emphasized - the presentation of lesson material in both attentive and non-attentive states (alternating levels of awareness for presentation of the same material) and the attempt to create a relaxed, non-defensive atmosphere in which both external and internal distractions to learning are minimized.

Concluding their study, the two state that:

> the demonstration of increased learning related to the inclusion of a relaxed, music-aided, imagery-filled instructional activity may well further increase public interest in investigating the varied educational benefits of non-ordinary states of consciousness. (Prichard and Taylor, Winter, 1978)[9]

[9]Allyn Prichard and Jean Taylor, "Suggestopedia Applied to Elementary Reading Instruction." The Journal of S.A.L.T, 3(4), Winter, 1978, pp. 243-247.

Author's Observations and Comments

In the author's visit to Atlanta in December of 1979, a few problems were observed which would have an effect on the success of this particular approach, although not currently being experimented with. Most of these problems are endemic to the normal public school classroom - such as absences, new students coming in while older ones are leaving, possible interruptions via messangers or the loudspeaker in the classroom, visitors such as this writer, changes in schedules (such as class parties, assemblies, impromtu occasions, etc.), irregular weeks (holidays, vacations), being in the middle of a cycle on a Friday and being unable to finish it until the next Monday, etc.

Applicable to this study is that some of Jean Taylor's students were learning disabled and in her years of using this technique, she has found that:

> Children with diagnosed learning disabilities have scored higher gains than the remedial group as a whole. Of course, many of these boys and girls have higher IQ's than the average of my students. (Taylor, 1978, p. 145) [10]

Teacher expectation as well as innate potential may both be operating. (See Pollack).

[10] Jean Taylor, "Teaching Remedial Reading with SALT", The Journal of S.A.L.T. , 1978, 3(3), pp. 141-145.

CHAPTER V - STUDIES RELATED TO SOME COMPONENTS OF SUGGESTOPEDIA/SALT

INTRODUCTION

Because suggestopedia is composed of many components, and various studies have been made comparing some of the components, this author felt it appropriate to look at a number of studies which have used one specific technique or another either with learning disabled kids, children with learning and/or reading problems, children with disruptive behavior or with the "normal" child in a regular learning setting. Components to be examined are: 1) stress management, 2) relaxation therapy (this includes studies on progressive muscle relaxation, alpha training, and EMG biofeedback training as well as conditions of rest and overt muscle exercises), 3) imagery, 4) verbalizations (self-suggestions; scripts to counteract negative self-concept, positive affirmations; 5) combinations of the previously mentioned, 6) suggestion, and 7) whole brain learning. Things to keep in mind from suggestopedia or SALT are the simultaneous use of the conscious and unconscious; the joy of learning and freedom from tension; the six elements for a suggestive set-up (authority, infantilization, double-planeness, rhythm, intonation, and the pseudo-passiveness); whole brain learning, the three anti-suggestive barriers; physical relaxation exercises; mind-calming; early pleasant learning recall; suggestions to try hard; and non-verbal communication.

STRESS

One of Lozanov's primary principles dealing with the learning environment is that there should be a joy in learning and that the student should be free of tension. As shown in the following section on relaxation, tension and anxiety in children with learning disabilities or learning problems can come simply from the learning environment itself, where they are experiencing repeated failure. The frustration associated with failure can lead to or contribute to the development of various avoidance behaviors and defense mechanisms which then become the focus of attention. At the recent international conference of the Association for Children with Learning Disabilities held in Milwaukee, Wisconsin, in February, 1980, Dr. Noel H. Williams (1980), an assistant professor of education at the University of Windsor, Ontario, spoke to the issue of "Stress and the Learning Disabled Child".

Three Kinds of Stress

Williams identified three kinds of stress: 1) physiological or systematic, which deals with the affect of stress on the tissue system; 2) psychological stress, which concern the cognitive factors leading to the evaluation of a situation as being of a threatening nature; and 3) social stress, which involves the disruption of a social unit or system. Williams (1980) goes on to cite the definition of stress proposed by Lazarus and Monet (1977):* "stress consists of any event in which environmental demands or internal demands or both tax

* Unable to locate this reference as it was referred to on a tape of the presentation.

or exceed the adaptive recourses of the individual, social system or tissue system."[1]

It can be easily seen that children with learning disabilities can experience all three kinds of stress, although the one most frequently related to the clasroom situation appears to be psychological stress. A child could interpret reading time (if this is his area of difficulty) as a situation of a threatening nature because, in his efforts to read, he constantly fails to meet the standards of the regular class. He may even be sensitive to social embarrassment, or the competitive nature which sometimes is present in the classroom. As related to the definition cited by Williams, both the environmental demands of teacher and parent expectations and the internal demands of personal expectations of functioning adequately in the classroom are not met to the satisfaction of the teacher, parent or student. Quite often these demands do tax or exceed the adaptive resources of the individual, therefore creating stress.

Symptoms of Stress

Williams (1980) goes on to identify six basic symptoms of stress in adults; and with probably one exception, these could apply to children under stress:

1) feelings of chronic fatigue, exhaustion or loss of energy;

2) loss of ability to enjoy recreation or human interaction without first having some chemical substance (not as applicable in young children);

3) increasing irritability, feelings of anger, resentfulness, feeling upset most of the time (this vicious cycle consists of frustrations, failures in school or work which lead to upset, which lead to alienatior of the home-base support systems, etc., etc.,);

4) feelings of pressure all the time, feelings of constricture or weight on the chest or shoulders; a sense of constant non-productive motion with concurrent frustration experienced at times when one is waiting in lines, at a traffic light, etc.;

5) feeling distracted most of the time;

6) feeling so depressed that there is no longer any kind of coping behavior to break the cycle of exhaustion and failure.

What is interesting to the author is that many of these "symptoms" of stress are identified as characteristic behaviors of the learning disabled child; and that quite often we are remediating (via behavior modification) those behaviors which are the signals that the child is under stress! An extreme example, but one the author is personally aware of, is the child who yawns frequently while attempting to read, has difficulty getting along with his peers, is irritable and upset most of the time, resents going to the special classroom for help with his reading and spelling, who wiggles a lot, can't sit still, has difficulty attending to a task, and who has difficulty concentrating and not being distracted by the many sounds and sights and movements in the classroom. We frequently would identify this child as having a learning disability in a particular area, say reading and spelling, that he is hyperactive (and may have need of Ritalin), and that he has an overlay or secondary problem of emotional disturbance. Again, which came first, the chicken or the egg. (The inability to read or the frustration associated with failure which gets in the way of being able to read!)

Sources of Stress

What Williams says is that it is important to be aware of the stressful situations learning disabled children find themselves in and of the negative affect they may have on the child's ability to read, write and do arithmetic. Williams has adapted a model developed by Joan Reynold on the Institute of Child Health of the University of London, England* of the stresses found in physically handicapped children. Many of the same situations apply to the learning disabled child. These are:

Stresses arising from:

1) Parental sources - the parental reaction to the child's handicap;

2) Hospital visits (though not as frequent in children with learning disabilities, although some LD clinics are located in hospital settings);

3) Limitations in activity;

4) Social limitations, differences in social relationships;

5) Dependence on others;

6) Education and employment;

7) Self-awareness, realization of one's handicap.

Williams proposes as a possible solution or aid in this whole area of stress, the early identification of children with learning problems and the various preventive measures we can follow with the young child to help avoid, or partially avoid the subsequent situations which the child will find stressful and start in the cycle of stress reactions. He concluded his presentations with an early identification model currently in use in Ontario and its effectiveness in helping to look at prevention as opposed to cure.

*Source unavailable at time of writing. Reference on a tape.

Additional Sources of Stress

In addition to the material presented by Williams (1980), the author had the opportunity to work with a group of teachers in the Milwaukee Public School System in the Fall of 1979 in an in-service course on "Stress in the Classroom". Class members helped identify the kinds of things which children find stressful at school, some with the help of their students. These are:

beginning or end of school year
beginning or end of the day
tests-preparation, taking, results
being called names

inappropriate expectations
peer pressure
low self-esteem
new school, teacher, room
health problems-chronic, permanent, temporary
going to principal's office

staying after school
parties, plays, musicals
field trips
recess/lunch
sports

change in routine

having things stolen
fights-threat of or actual
seeing the nurse
homework-conflict with family schedule
shot day
room temperature
barometric pressure
general health
seating arrangement

inadequate clothing (embarrassment)
inadequate rest
interruptions
being ignored
taking showers
announcements over loud-speaker
physical safety

Antidotes

It is the author's experience and opinion, that many of the above-mentioned stressful situations in the classroom could be avoided or reduced in their impact by using some of the techniques which are a part of suggestopedia - such as the physical relaxation, mind-calming exercises, guided imagery, imagining the positive outcome of a situation, taking deep breaths, seeing oneself as a capable and lovable person,

improving class support, etc. A warm, positive suggestive classroom atmosphere as recommended for the maximum effect of material taught suggestopedically could go a long way in the regular classroom, the self-contained special education room, or the resource room.

These same teachers came up with a list of things they can do and are currently doing to help reduce the negative effects of the above-mentioned stressful situations. Included were such things as reviewing material prior to a test, running outside, playing active games, change of air, working with their hands, playing peaceful music, giving praise, acknowledging the stressful situation, using humor, turning off the lights, giving relief time for students to chat with their neighbors, taking a milk break, changing the subject and removing the disruption or disruptor. Expensive, special equipment is not needed nor is the expenditure of a lot of time or energy, yet the payoff far exceeds what was put in.

Additionaly specific therapy for dealing with stress and observable hyperactivity and avoidance behaviors will be discussed next by looking at specific studies and cases.

RELAXATION THERAPY

Many learning disabled children, as part of their definition, are identified as hyperactive and impulsive. This being the case, the author felt it appropriate to examine a number of studies and their effectiveness in the use of

"relaxation therapy" with hyperactive, anxious or impulsive children - whether or not the children are identified as learning disabled.

Following are studies of the use of muscle relaxation, rest, exercise, biofeedback training and alpha training. Although most studies were done with children, a few with adults were included, as well as some combination programs.

Muscle Relaxation with Children

a) Kwako:

The first study examined (Kwako, 1979) was based on the use of Bruno (1974)* and Jacobson's (1938) program of tension/release with a group of 16 hyperactive learning disabled boys ages 8 to 12 years who were attending a special school for children with learning disabilities in the greater Boston area.

Students were tested on the Developmental Test of Visual-Motor Integration, the Motor Accuracy Subtest of the Southern California Sensory Integration (with left hand and right hand components), the Connors Parent/Teacher Questionnaire (a rating scale of hyperactive behaviors), the Sophistication of Body Concept Scale, and the House-Tree-Person. On the t-test data analysis, all the measures indicated significant change. Redoing the data on an analysis of co-variance, the results of the Development Test of Visual-Motor Integration, the Motor Accuracy, and the House-Tree-Person were all very significant (less than .05 level) while the others were significant for discussion. On a subjective self-report on the part of

*Source unavailable at time of writing.

Kwako (1979), she noted positive attitudinal changes, an increased attention span, increased balanced expression of emotions, and the viewing of the experimental sessions as a special and positive experience. In summary, improvements were found in visual-motor integration, eye-hand coordination, and self-concept. The examiner and teachers involved in the study found there was also an increased respect for authority.

The procedure used involved an adaptation from Bruno (1974) and followed these seven steps:

1. Determine if the child can be still and quiet for at least 10 seconds.
2. Determine if the child can give and hold eye contact for 10 seconds.
3. Habituation - make sure child does not avoid touch.
4. Establish a schedule for relaxation exercises.
5. Begin exercises to relax skeletal muscles. Build progressively the exercises of the torso within a five-minute exercise.
   Phase 1 - you shake, drop and aid tensing for the child;
   Phase 2 - child shakes, drops and tenses on his own from your verbal command.
6. Change exercises to have child maintain relaxation on command from 5, 10 to 15 seconds (this is similar to the method in Jacobson (1938) Tension/ Release).
7. Combine relaxation training with other related disciplines of training, such as biofeedback, authogenic therapy, biogenics, or a combination of these.

b) Mantione:

In another study, Mantione (1975) experimented with a group of 12 students exhibiting hyperactive behaviors. Half were in the rest group, half in the relaxation group, and each acted as his own control. In his extensive introduction and

discussion of hyperactivity, Mantione (1975) states the six behaviors most commonly associated with hyperactivity: 1) fidgety, restless; 2) inattentive; 3) hard to manage; 4) cannot sit still; 5) easily distracted; and 6) cannot take frustration. Related are the areas of emotional disturbance, visual and auditory distractibility, learning and psychological disorders, impulsiveness, and distraction by internal and external stimuli. Maintione states that hyperactivity and its maintenance are a result of both operant and classical conditioning. Some of this hyperactivity can be reduced by minimizing the conditioned stimuli, particularly where the hyperactivity is environmentally caused. He further contends that the cycle of hyperactivity starts in some cases with 1) kids who are developmentally unprepared for school and as a result experience frustration and failure; 2) they develop escape and avoidance behaviors in order to deal with the anxiety which is generated by conflict (between expectation and outcome of No. 1); 3) these escape and avoidance behaviors, many of which fall in the category of the six behaviors mentioned previously, are paid attention to in a negative, punitive fashion; 4) as a result of this attention, they are maintained. Mantione (1975) was concerned about the use of reciprocal inhibitions and as he quotes Wolpe (1958):

> ...if a response inhibitory to anxiety can be made to occur in the presence of anxiety-evoking stimuli so that it is accompanied by a complete or partial suppression of the anxiety response...the bond between these stimuli and the anxiety response can be weakened. (p. 189)[1]

[1]Frank Mantione, "A Comparison of the Effects of Muscular Relaxation and Rest on the Behavior of Grammar School Children", Dissertation presented to the State University of New York, Buffalo, September, 1975.

Mantione's (1975) hypothesis is that since research seems to indicate that hyperactive behavior is brought about through both respondent and operant conditioning and that responses may in fact be elicited by a wide range of minor stimuli and maintained by attention, then it follows that if this is accurate, then a procedure based upon reciprocal inhibition - in other words, the use of muscular relaxation - should result in a decrease in hyperactive responses since muscular relaxation is antagonistic to high excitement. Also, reinforcement of relaxation responses should further reduce hyperactivity for the same reason.

Questions he was investigating were: 1) can hyperactive children be taught progressive deep muscle relaxation or rest upon instruction? and 2) if hyperactive children can be taught these responses, does it affect their behavior outside the treatment session?

Subjects (N=12) were instructed that they were going to have either a 20-minute rest period or a 20-minute relaxation period, during which time they were to 1) lie down on their m... 2) be silent, 3) be still, and 4) follow instructions. If they did these, they would earn points. If enough points were earned, they could choose a prize at the end of the period. Subjects were told when they had earned a point and score was kept for them on the board. Criteria for learning muscular relaxation or rest was established as a mean of 20% or less off task behavior (80% on task behavior). Difference between the two groups was that progressive muscle relaxation was taught to the relaxation group, with some modification from the

Jacobson technique for the subjects who were unable to reduce muscle tension on command - (Arms and legs of these subjects were manipulated until they reduced their muscle tone, similar to Kwako's (1979) adaptation).

Results of Mantione's (1975) study showed that 66% of the subjects were able to reduce their off-task behaviors during treatment period to criteria level. Two met the criteria for learning muscle relaxation and two of the four who reduced off-task behaviors maintained their level during post and follow-up phases. In his discussion, Mantione (1975) states that "some hyperactive grammar school children can be taught to relax or rest through the use of operant conditioning if the environmental antecedents and consequences are properly arranged." (p. 48)[2] He also found that reduction in the conditioned stimuli and the creation of a calm, restful atmosphere apparently facilitated non-hyperactive responses during therapy sessions and that these responses were strengthened by positive reinforcement.

Suggestions for change are that a wider range of reinforcers, both primary and secondary, which are determined for each child ahead of time be used and that the therapy session be conducted in the classroom once the appropriate behavior has been established. He recommends techniques involving reciprocal inhibition and that they have value in reducing hyperactivity - they are safe and quickly taught to teachers

[2]Frank Mantione, "A Comparison of the Effects of Muscular Relaxation and Rest on the Behavior of Grammar School Children", Dissertation presented to the State University of New York, Buffalo, September, 1975.

as well as parents, they are inexpensive, they can be easily administered, and children can be taught to relax themselves through these techniques (Mantione, 1975).

c) Ackermann:

A similar program designed to help children control their own hyperactivity has been developed and is currently being used by Dr. Mark Ackermann (1980). The program, Self-Taught Inner Control of Hyperactivity (STICH), involves the teaching on a one-to-one or small group basis of muscle relaxation in four settings (lying on back, lying on stomach, sitting on chair, and standing still), moving slowly (stretching, walking slowly, rocking slowly, and balancing a book on one's head while sitting in front of the mirror) and in relation to academics in which the student is instructed to work quietly with his/her feet flat on the floor, and the only movement to be that which is necessary to perform the task.

In the initial training stage, students are rewarded initially on a variable interval schedule of twenty seconds to two minutes. Eventually, this is gradually extended to seven to fifteen minutes. Ninety percent (90%) compliance is established for three days in a row before moving to a more difficult level. Whenever the timer goes off the student asks: "How did I do? Did I...(whichever behavior is being shaped)." To this the teacher responds either: "Yes, you did..." and gives primary and/or secondary reinforcers or: "No, you didn't...How do we...?" The student then demonstrated the appropriate behavior; if unable to then the teacher models the behavior.

d) Klein and Deffenbacker:

Klein and Deffenbacker (1977) report on a study which was done with the use of relaxation and exercise for hyperactive impulsive children. Pre and post-testing was done on the Continuous Performance Task and on the Matching Familiar Figures. Two contrasting groups as well as attentional-training placebo group, a no-treatment group and a non-hyperactive control group were used. As in other studies, the hypothesis was that by training children in relaxation, a response pattern would be induced which would be incompatible with heightened activity level, therefore, relaxation and greater calmness would replace hyperactivity. The other hypothesis was that exercise would reduce heightened tension by partial fatigue (satiation).

The relaxation group followed the instruction, with modification of Wolpe and Lazarus' (1966) progressive muscle relaxation. The exercise group worked with a regimen of agility, power, and speed tasks, while the attention-placebo training group made various objects from "Play Doh". Results were that on the Matching Familiar Figures, comparisons between mean error rates showed that the relaxation, exercise, and non-hyperactive control groups performed significantly more accurately than the untreated impulsive control ($p > .05$), while the attentional-placebo control was not significantly different from other groups. No significant differences were found for the Continuous Performance Task. They suggest that in addition to either muscle exercise of muscle relaxation, some

children may benefit from longer and more individualized relaxation training or biofeedback assisted relaxation training (Klein and Deffenbacker, 1977).

c) Pereboom:

In a description of an experiment to the American Academy for Cerebral Palsy, Margaret Pereboom (1977) reports that:

> periods of relaxation therapy, including adapted yoga exercises, were more helpful than periods of tutoring and group counseling in improving the behavior of children with learning disabilities. [3]

Muscle Relaxation with Adults

a) Chaney and Andreasen:

In studies of muscle relaxation in populations other than children with learning problems, two studies can be briefly mentioned. Chaney and Andreasen (1972) used a memorization test requiring the recall of random numbers with three different groups of subjects, one group trained in body mechanics, one taking a placebo bill to reduce neuromuscular tension, and one given instruction in relaxation techniques. The third group, the subjects trained in relaxation techniques to control neuromuscular tension, performed significantly better on the final test than the controls. Tension was induced with the addition of a verbal threat when the subjects were retested.

[3] M. Pereboom, "Relaxation Therapy", Brain/Mind Bulletin, 1977, 2(8), 3.

b) Wilson and Wilson:

Wilson and Wilson (1980) report of a study which attempted to test the hypothesis that muscle relaxation would reciprocally inhibit anxiety during a paired-associate learning task. Partial substantiation for the hypothesis was obtained for high anxiety subjects, but data for the medium and low anxiety level groups was inconsistent with the hypothesis. Of the variables measured, heart rate was the physiological variable which best discriminated the groups.

Anxious Behaviors

In his work with Robert, a tense and unsure reader, David Hart (1974) taught him how to manage his anxiety by practicing relaxation exercises. In his experience as an educational psychologist, Hart comments that there are children who cease to progress in reading, even after having acquired many of the necessary reading skills. Their performance tends to be erratic and their problems tend to be intractable as well as not easily remedied. They usually need adult attention, encouragement and direction even to perform at thier best and that when they leave the teacher, they tend to practice selectively the bad habits which were reflected in their poor performance.

As in Ackermann (1980) the student was trained in relaxation, learning the difference between movement and stillness and between tension and relaxation for each body area being relaxed. Emphasis was placed on changing the child's anxious behavior, rather than on specifically remediating his reading. Behaviors identified were those which involved learning limb and neck

muscle relaxation in order to avoid inappropriate "anxious" behavior. Each of the skills was practiced while Robert was reading as soon as he had successfully demonstrated that particular skill, such as relaxation of hands and feet. He was also praised when he was looking at the book being read and attempting to build prior to guessing a word.

Hart (1974) reports that this four-month program, based on the child's self-control of behaviors which were apparently competing with effective reading, seemed to lead to improved performance during treatment and in class, showing a change on the reading age of the Burt Graded Word Test of only 5.9 years at onset to 7.5 years after only two months of treatment and on the Neale test at about an eight-year level, whereas before his test performance was unscorably low. In summary, Hart (1974) proposes that the emphasis on removing surplus distracting behavior was more important than any teaching of reading skills, in Robert's case. Although still in need of remedial training, "the program of relaxation training seemed to enable Robert to use more efficiently the skills he initially possessed and possibly to acquire new skills more efficiently." (p. 24)[4]

Biofeedback

a) Carter, Combined with relaxation:

The rationale for the use of biofeedback/relaxation training for this particular study is based on the premise that learning is most efficient when the child is internally

[4]David Hart, "Helping the Underperforming Reader.", Special Education: Forward Trends, 5(4), pp. 23-24.

relaxed and mentally attentive (similar to what Lozanov said that learning should be a joy and free of tension). Poor daily performance in school can be stresful and anxiety producing for many children and this anxiety can often result in decreased school learning as the vicious cycle goes on. Carter (1980) found that using a treatment consisting of 10 minutes of EMG feedback on the preferred forearm, 50 minutes of handwriting training and listening to 8 to 10 minutes of visual imagery relaxation prior to training twice a week plus home practice of taped relaxation followed by a handwriting exercise done three times a week resulted in significant gains in all but one of the variables measured. Gains showed in reading, spelling, auditory memory, IQ, handwriting legibility, observed behavior, and self-concept. There was a decrease of errors on the Bender and there were no gains in arithmetic. Significant gains were shown in all three of the populations used - learning disabled, educable mentally retarded and non-diagnosed manifesting school learning problems.

In summary, the results:

> indicate overall practical as well as statistically significant biofeedback/relaxation treatment effects on an array of cognitive, perceptual-motor, and affective variables. These investigations involving over 200 experimental children indicate that EMG/relaxation treatment may be a viable supportive service for children manifesting chronic academic learning difficulties. [5](Carter, 1980, p. 4).

[5]John L. Carter, "Efficiency of Biofeedback/Relaxation Treatment for all Exceptional Children", Paper presented at the ACLD International Conference, Milwaukee, Wisconsin, February, 1980.

b) Lubar:

In another study, biofeedback was used in the effective treatment of the hyperkinetic syndroms of an 11-year old boy (Lubar, Bn/Md, 1977). This child was trained in sensorimotor rhythm (SMR), which is associated with enhanced motor inhibition. (Earlier in his study, Lubar found this to be of value in the treatment of epilepsy). The students in this experiment were males between 6 and 12; diagnosed as hyperkinetic by a pediatrician; regularly taking Ritalin; judged hyperkinetic according to the Stewart Teacher Questionnaire; and free of specific sensory defects or other disorders as mental retardation or epilepsy. Lubar found that the child described above improved in at least eight of the total thirteen behaviors on the Stewart Teacher Questionnaire after several months of biofeedback training while still continuing Ritalin treatment. Lubar states: "So far, it appears that SMR biofeedback is most beneficial for those children in whom the hyperkinetic symptoms are the most pronounced."[6.1] (1977) Included in a new project will be an evaluation of the child's behavior after medical treatment has been withdrawn.

Alpha Training

A study by Nall (1973) covers a similar area, that of alpha training with the hyperkinetic child. Initial report shows that one child using alpha training was able to go to sleep with his alpha turned on. He was able to walk instead of run and became a controllable fourth-grader in his classroom. Another child's unreadable writing became legible and pretty after alpha development sessions. Some children,

6.1 "Learning, Education, Creativity, Suggestology, etc." Theme Pack (No. 11) from Brain/Mind Bulletin, Vols. I, II and III, 1977, 1978.

after the program, asked for the examiners to resume alpha training sessions, claiming it made them work better. The author reports it is not known whether the improvement came specifically from the alpha training, the special attention, the relaxation or some unknown factor. He does strongly emphasize that someone somewhere needs to find a way to help the hyperkinetic, learning-disabled child whose EEG reads "little or no alpha", whose defenses and barriers are lowered, whose attention is unfocused and whose emotional involvement and judgments are detached from reality. They need to be helped to gain a sense of well-being, tranquility and relaxation and well as increasing their awareness of which of their thoughts and feelings accompany a good alpha wave.

Combination

a) "Quieting Reflex":

Although information is very sketchy at this point, a technique called "The Quieting Reflex" has been developed by Charles Stroebel, Laura Stroebel and Margaret Holland. It combines relaxation (physical and mental) and positive suggestions to be used in the education environment with children with learning problems.

b) Lachniet, Relaxation and affirmations:

In a final, but by no means minor, study on the use of muscle relaxation with school age children, physical relaxation techniques are taught along with a method on how to program for physical, mental and emotional well-being. Additionally, children with specific problems such as learning disabilities

will be given individualized tapes with affirmations to work with. Currently, Mary Lachniet, RN, school nurse for the Holt, Michigan Public Schools is working on an individual basis with a few hyperactive learning disabled children. She meets once a week with them and goes over a biogenics exercise. Every night they are to listen to an individualized tape. As of November, 1979, she reports that results are encouraging, but that it is too soon to see lasting results and that it sometimes takes months for a positive change to occur. In her communication with the author in November, 1979, Ms. Lachniet wrote of a pilot project planned for the '80-81 school year in which the details of research will be developed by the county school district research and evaluation department. The program will consist of the school nurse going into the classroom and teaching the students how to totally relax physically and how to affirm positive beliefs about their physical, mental and emotional well-being. It is specifically designed to furnish students with stress management skills, based on the information from Steven Locke* that people who cope poorly with stress seem to have less physical immunity against certain diseases. The underlying premise of the pilot project is that how we perceive and respond to an event determines whether it is stressful for us, and that the perception and response to any given event is not fixed and can be changed.

Expected outcome of the study is reduction of student absences due to illness and an improved self concept as

*Source unavailable.

measured by the Tennessee Self Concept Test. Progressive relaxation will be practiced twice or more daily for the school year, with each five to ten minute relaxation period to be followed by two or three affirmations specific to each students individual needs. (See appendix for schedule, guided exercise for releasing a negative feeling, and list of affirmations).

As of writing this paper, Ms. Lachniet reports that a questionnaire was given one class of 5th graders who were using the technique this year. Eighty-five percent (85%) of the students said they liked the relaxation exercises, many were doing them at home and other settings and some (3) were hoping to involve their families in relaxation and positive self-statements.

IMAGERY

Background on Imagery

At the first annual conference of the American Association for the Study of Mental Imagery, which met in Los Angeles in 1979, speakers and workshop leaders were in the process of redefining imagery to mean more than simply the ability to visualize. A new definition of imagery has been expanded to include internalized sounds, feelings, words, symbols, and even subtle body sensations (Ferguson, July 16, 1979).

One of the conference attendees, Paul Bakan, a researcher on the specialization of the left and right hemispheres at Simon Fraser University, cautioned that we may be over-simplifting our idea of the right brain as being the primary source of imagery (Bakan, in Ferguson, July 16, 1979). In

the process of imaging, we use muscular relaxation as a facilitator which is controlled by the left brain. The left brain then becomes cooperative in imagery, free association and recall. He further states that different facets of brain organization probably facilitate different modes of imagery. His hypothesis is that the "right brain produces 'raw' images under conditions of relaxation. When the right and left hemispheres are communicating, the 'raw' image gets 'cooked'." (p. 1)[6].

In her paper, Nelson (1980) points out the importance of imagery and its place in the memory process, particularly as applied to children with learning disabilities. What may appear to be poor memory, may, in fact, be the failure to develop a mental image of the word which is to be recalled later. She cites Harris and Sipey (1975) who write that if there is no initial registration of the word, there will be nothing to remember.

One of the ways in which we remember things is through eidetic images, a phenomenon similar to photographic memory. In the study of child development, Nelson (1980) states that:

> researchers believe eidetic imagery is underlying phenomenon of the learning process and tends to diminish in adolescence when abstract thought and higher verbal skills develop. (p. 51)[7]

Unfortunately, our particular culture does not encourage children to think imagistically.

[6] Marilyn Ferguson, "Educators Urge Use of Imagery," Brain/Mind Bulletin, Vol. 4, No. 17, July 16, 1979.
[7] Nelson, ibid, 1980

Imagery and Suggestopedia

In the Lozanov method and its American adaptation, SALT, whole brain learning, the use of the conscious and paraconscious, the joy of learning, and freedom from tension are all important components. Imagery, the ability to use all of one's senses - visual, kinesthetic, tactile, aural, and olfactory-provides avenues to the paraconscious and gives us access to our imagination. Whole-brain learning means exactly that - the use of both the logical left hemisphere and the intuitive, creative right hemisphere to increase our capacity to learn and remember. (See more in the section on right brain/left brain).

One of the exercises or techniques in suggestology is to have the individual feel, hear, taste, see, smell - experience to the fullest the material presented, thereby hopefully developing as full and as highly charged an image or impression of the material being presented. The more senses which are used, the more likely an image will be made and the material remembered.

Specific Case Studies and Relation to Suggestopedia

A few studies were found in which imagery was used either in the regular classroom or in a special testing setting. The following studies have a lot to say about the use of imagery with both the "normal" and the "special" student.

a) Imagery and disruptive behavior - Galyean:

Beverly Galyean, a Los Angeles consultant on confluent eduation, has reported experimental evidence that five minutes

of daily guided imagery minimized disruptive behavior in low-achieving students in an inner-city high school The technique also seemed to enhance their learning. The experiment shows that meditation activity (guided imagery) has both cognitive benefits and affective changes (Galyean, in Ferguson, Dec., 17, 1979).

The guided imagery which was used for this study was designed:

> to help students focus on their inner strengths, view themselves as potentially successful and see the teacher as a helper in their quest for success. (p. 1)[8]

Students reported that their grades and concentration improved, they felt more comfortable in the learning setting and every student in the experimental group asked that guided imagery be introduced into other classes. Observers reported that the experimental group became more attentive, involved in lessons and responsive to their teacher. In the case used as a control, the disruptive behaviors increased steadily and by the end of the three-month experimental period, their disruptive behaviors had doubled in frequency.

Although not having access to the exact wording of the guided imagery, it sounds by description a great deal like the ones used by Jean Taylor in her remedial reading classes and suggested by Schuster, Bordon & Gritton, (1976) in the manual for classroom teachers.

[8]Marilyn Ferguson, "Guided Imagery Keeps Disruptive Behavior in Check", Brain/Mind Bulletin, Vol. 5, No. 3., December 17, 1979.

In a related article, Galyean (1979) stresses that a holistic approach should use the affective to increase students' receptivity to cognitive goals. This appears to be what is happening in the suggestopaedic cycle discussed earlier. The reintroduction of imagery and meditation enhances the function of the intuitive mechanisms, according to Galyean (1979).

b) Rose:

Robert Rose (in Ferguson, July 16, 1979), a fifth and sixth grade teacher in San Bernadino, California, reports on the use of imagery, meditation, massage and training in communication. According to Rose, "The teacher's rapport with students is central to the effectiveness of guided imagery." (p. 2)[9] Sounds a lot like the authority, infantilization and use of double-planeness (the verbal and non-verbal conscious and unconscious) of suggestopedia. He further states that children are responsive to fantasy because it is something which is theirs alone, something they can identify with at a deep level and use to learn about themselves. He reports that "kids who participate in the program become calmer, friendlier and more themselves." (p. 2)[10]

c) Beebe:

Imagery and its use in the classroom is reported by two teachers, Robin Beebe (1979) and Maureen Murdock (1970)

[9]Ferguson, ibid, Brain/Mind Bulletin, July 16, 1979.
[10]Ferguson, ibid.

in their separate efforts at incorporating guided imagery. They also provided a number of expressive forms for the images which come to the children's consciousness. After exploring dream images, and daydreams, Beebe guides a group through the deliberate use of the imaging process through experiences with guided images. These exercises are followed by the opportunity to express images through such external forms as drawing, dancing, singing, writing and talking - any of them to be kept private or shared with the group. In her own words, "Exploring the image using non-verbal modalities such as movement and various art forms often serves to deepen the meaning of the image and makes its translation into verbal symbols more significant." (p. 31)[11] That sounds reminiscent of the use of dramatizations for active dialogues in the learning of a foreign language (Lozanov) as well as the suggestive link used for learning rare English words, (Schuster, 1976).

Children who might ordinarily interrupt classroom discussion or tune out were found by Beebe (1979) to become involved and respectful of the experiences of the other students. Because of there being no right or wrong answers the child with learning problems would be more likely to share and become involved in classroom discussions.

Very similar to the suggestive set-up of suggestopedia, Beebe (1979) stresses that classroom atmosphere is important

[11]Robin Beebe, "Imagery in the Learning Process", Dromenon, Winter, 1979, 2(3-4), pp. 30-33.

that the group needs to be together, alert and relaxed and learning in a supportive climate. She suggests various relaxation techniques very similar to those mentioned earlier (breathing exercises, tensing and relaxing the body, and "centering" exercises). She also stresses the importance of sound, as in a group chant or singing of a song where both a rhythm and tonality are established, or through listening to appropriate music. This is unlike the elements of the suggestopedia of rhythm, intonation and the pseudopassiveness.

d) Murdock:

In a related article, Murdock (1979) discusses her use of guided imagery with her class of 26 third-grade students. Each morning is started with 5 to 10 minutes of "quiet time" during which time she leads the class in meditation, guided imagery and mutli-sensory or psychophysical exercises. In her four years experience starting the day this way, Murdock has found that:

> the children show greater concentration span, alertness, awareness of themselves and of each other and the ability to relax and heal themselves of stress-induced complaints such as headaches and stomach aches. (p. 39)[12]

She finds them able to express themselves more fully, in non-linear modes, through art, creative writing and poetry. Those children who tend to be non-verbal find an outlet for their special styles of knowing.

[12]Maureen Murdock, "Brain Child in the Promised Land", Dromenon, Winter, 1979, 2(3-4), pp. 39-40.

Although she describes the physical set-up, she stresses that the set-up is not primary; but the attitude of the teacher and how she/he motivates the activity seem to be of primary importance. Again, this sounds similar to the non-verbal communication and the positive-suggestive atmosphere referred to previously. She suggests that suggestive expectancy can be signaled by the turning off of lights, sounding a gong or triangle, playing soft music, or lighting a candle. Murdock follows the exercise with a period of discussion and, time permitting, an opportunity for the children to draw or write their experience. She suggests this exercise as an adjunct diagnostic tool in helping to determine which sense particular children respond to and hopefully being able to gear some learning material to that sense.

In their drawing of the two sides of the brain, children remembered perfectly what was suggested for which side of the brain; Murdock concludes that this demonstrates that memory is closely attuned to affect and relaxation. One child who had previously been tested as having minimal auditory sequential memory draw a mirror image of everything she saw! Murdock also found that this exercise was a perfect outlet for the non-verbal remedial readers in her class. They were able to verbalize and write in great detail the accounts of their adventures and that "their memory of this experience and of material taught directly following this exercise is clear. They are more relaxed and have more highly attuned listening skills. As a result, many of these

children who ordinarily 'tune out' and become behavior problems are able to concentrate, cooperate with the group, improve their self-image and begin to enjoy expressing themselves." (p. 40)[13] She also reports that the class as a whole was extremely alert, enthusiastic after this exercise and enjoyed subsequent learning material with deeper concentration. It would follow that reading images of the actual material being taught would enhance learning and memory.

e) Houston:

A final story is in defense of the use of imagery in the classroom and the fact that there are some children in our classrooms who are in fact quite bright but are labeled as learning disabled, learning problems, etc. Because they are more adept at expressing themselves and learning in modes not ordinarily used in the public school classroom. Jean Houston (1979) tells the story of Billy, a child who was flunking out of school, yet was capable of and had built phenomenal machines in the basement of his home. When asked how he figured out things, as in his demonstration of figuring the area of the basement, he described his way of thinking in terms of seeing pictures. In his words, "when I close my eyes to figure something out it's like a cross between music and architecture." (p. 18)[14] When tested soon after that on a standard IQ test, he tested at about 85. After Billy and Jean Houston rewrote the test to that he could use his imagery and musical thinking to answer the test questions

[13]Murdock, ibid, Dromenon, Winter, 1979.
[14]Jean Houston, "Through the Looking-Glass: The World of Imagery" Dromenon, Winter, 1979, 2(3-4), pp. 17-23, A Journal of New Ways of Being

(which in fact involved even writing the questions in such a way that they could be figured that way!) he then scored an IQ of 135 - fifty points higher than his previous score!

Following this discovery, Billy and Ms. Houston then approached his teachers, working with them to figure out ways of presenting information and questions to children like Billy so that their special styles of imagistic thinking could be encouraged. As of the writing of the article cited, Billy is 23 years old and on his way to becoming a brilliant design engineer and inventor as well as having changed from the withdrawn, almost autistic child he had once been into becoming much more outgoing and involved with school and friends.

This case of Billy is definitely unique, but probably not as rare as we might like to think. How many other children are there who have been classified as learning disabled, retarded or otherwise who think like Billy.

SELF-ESTEEM, SELF-STATEMENTS AND SUGGESTION

Self-Esteem Learning Disabilities

The area of self-concept, self-image and self-esteem is considered important in education, especially in the education of the learning disabled. By definition, the learning disabled are of normal or above normal intelligence who for a variety of reasons are not functioning at their expected potential. How frustrating this must be for the normally intelligent child to not be able to read, compute, write legibly, kick

a ball, and/or remember, etc., as well as the child next to him who may even be less bright than he or she. Encountering frustration and failure in the competitve setting of school can produce anxiety which then contributes to tension which makes it that much harder to learn. As a part of all this is loss of self-esteem, feeling like you must be a dummy, being treated as if something is "wrong" with you, being involved in copious testing and in many cases being placed in a special classroom apart from your peers, even if it means you're in a less frustrating setting.

The premise of suggestopedia that learning is to be a joy and the child is to be free of tension and anxiety, that learning is easy, and that you'll be able to remember more and better than in the past to a child with a learning disability sounds like pie in the sky. As mentioned in Schuster, Bordon and Gritton, (1976), the three anti-suggestive barriers are particularly strong in the learning disabled child or the one with some learning problem. Their total learning experience is that it is hard, frustrating, tension producing, and no matter how hard you try it's never enough to be "perfect". Because of such heavy messages which the learning disabled are likely saying to themselves, more than the usual effort will need to be made to circumvent these barriers. As mentioned in the account of Charles Gritton, one student still didn't believe he could actually spell perfectly. He did not want his self-concept disturbed.

Positive and Negative Self-Statements

As mentioned in the studies of Schuster and Vincent (1979), Gritton (1976), Pollack, (1980), Prichard and Taylor (1976, 1978) and Nelson (1980), these negative self-statements of the anti-suggestive barriers need to be addressed before more increased learning can be done to the potential of the individual student. Some of the scripts for dealing with negative self-concepts, negative feelings, reduction of text anxiety, the enhancement of memory, and improved study skills of Zuberbier, Lachniet and Barber (1980) are included in the appendix as examples of what can be used and has been used effectively in helping a student deal with negative self-concepts and feelings of inadequacy. In Barber's (1980) article, he cites the goal of training in the use of self-suggestions to be to minimize self-defeating self-talk and to increase the number of useful, positive self-statements. Many of the statements said in a "suggestopedic" setting when said internally would be classified as self-suggestions or positive self-statements. Many are used in Jean Taylor's classroom (see enclosed tape).

These statements are similar to what some would call affirmations. Both Zuberier (1980) and Lachniet (1979) list affirmations they've used with students to counteract negative self-statements.

Powers of Suggestion

Pritchard continues by stating that:

> until recently no person
> had evolved a theory of instruction
> which set forth the subtle tools
> a teacher needs to impact on student
> motivation and expectation and
> to teach all of his brain in such a
> way that accelerated rates of learning
> occur. (Pritchard, 1978, p. 209)[15]

Lozanov advanced the theory, and the tools are the powers of suggestion. When properly applied, the reserves of the mind are activated.

Limiting Beliefs

During the procedures of the Third International Conference on SALT and Suggestopedia, Allyn Prichard (1978) points out so well the importance of limiting beliefs, motivation and whole brain learning concepts as well as elucidating on seven key sources of suggestion available to and used by teachers in their daily contact with students and about the activating of the reserves of the mind. Prichard so simply puts it: "The mind functions within the limits of whatever belief system it accepts as being true." (1978, p. 208)[16] Limiting beliefs can be such overt or subtle statements as "school is a bore", "What's the use of trying", or "I can't learn to read". Positive beliefs which enable the mind to move into higher gear and achieve on higher and more different levels are such things as: "learning is fun" and "It is possible for me to do better than I thought." Most of the battle is over when we come to believe the positive statements, and see as true that we can learn more, more easily and with more fun that we previously thought possible.

[15]Allyn Prichard, "An Introduction to SALT/Suggestopedia: The Journal of S.A.L.T., 1978, 3(3), pp. 206-210.
[16]Prichard, ibid.

Motivation

Additionally, motivation is another important factor in activating the reserves of the mind. If the task isn't in some degree challenging and essential as opposed to boring and trivial, we are not motivated to invest much energy in it (Prichard, 1978).

Key Sources of Suggestion - Classroom

Seven key sources of suggestion are elaborated on (Prichard, 1978). They are: 1) teacher verbals - positive, supportive, firm, frank, friendly, etc.; 2) teacher non-verbals - body language, postures, gestures which can generate feelings of acceptance, confidence of the opposite; 3) classroom decor - either support interest in learning or not; 4) lesson materials - formed for ease of use, taking advantage of color psychology, or otherwise; 5) activities - motivating, interesting, right hemisphere directed or not; 6) peer suggestion - which can be in everyone's self interest for everyone to succeed or contrary to that; and 7) within student suggestion on both the conscious and unconscious levels of the mind - such as what does the student think to himself and his abilities. Prichard points out that suggestion is everywhere, we cannot escape its impact, and the teacher has the choice of taking control and putting positive order to these various suggestions or letting them go on randomly or possibly even negatively and destructively (1978).

Negative Suggestions about Learning

Begriana Belanger in a recent article (1978) spells out very clearly five basic suggestions of a negative nature which

we have inherited, and therefore, accepted from the past. This "negative brainwashing" has seriously reduced our confidence in our capacities. These are: "1) Every human being has modest intellectual potential; 2) While growing old we lose considerably the little potential we have; 3) Learning is a long difficult process requiring a lot of effort and concentration; 4) Mathematics and foreign languages are particularly difficult to study; and 5) One is able to learn a new text only after several re-readings." (p. 179)[15]. These statements make up part of the negative conditioning which needs to be circumvented and eventually proven to be inaccurate in order that rapid, accelerated learning can be accomplished and believed to be possible.

Barber

a) Self Talk:

In his article, Barber (1980) states that there is a stream of self-talk, feelings and images which appear to be going on practically all the time, not only when we are awake, but also most of the time when we are asleep. These things that we are saying to ourselves, according to evidence which Barber cites, enters into the casual chains that determine our behavior. Unfortunately, currently most of our self-talk is a mixture of current concerns, associations to past and present events, fantasies about the future, as well as worries and other "negative" or "self-defeating" thoughts. "Most individuals rarely say especially useful or positive things about themselves." (p. 1)[16].

[15]Belanger, ibid, Journal of S.A.L.T., 1978.
[16]Theodore X. Barber, "Training Students to Use Self-Suggestions for Personal Growth: Methods and Word-by-Word Instructions,", The Journal of S.A.L.T., in press, 1980.

Since the evidence is that our self-talk does enter the "casual chains that determine our behavior", then it is particularly important, especially with those who have negative self-images, that they learn and regularly use positive self-statements as part of the process of improving their functioning in the world. This process should be as essential to our educational system as teaching the times facts.

b) Assumptions:

Barber (1980) spells out five basic assumptions which are at the foundation of using training in self-suggestions in the educational settings:

1. Humans are constantly saying things to themselves;

2. What we say to ourselves plays a role in determining how well or poorly we enjoy our lives and cope with life demands (See Lachniet, 1979, on the study of coping skills);

3. Self-defeating self-suggestions such as "I can't...", "What if..." enhance feelings of unhappiness, frustration, and anxiety and make coping with the tasks and demands of daily life more difficult;

4. With practice and training in the use of self-suggestions, we can learn to reduce our harmful self-talk and increase our neutral and positive self-talk;

5. By doing No. 4, we can increase our enjoyment of life and cope more effectively with ongoing events.

c) Suggestions becoming self-suggestions:

Barber (1980) goes on to cite the works of others who have shown the positive effects of the use of positive suggestions with various neurotic clients and how potent the effects of suggestions are at times.

He strongly states:

> Without hesitation all knowledgeable present-day researchers in the area (of hypnosis) agree that suggestions from another person are effective, with or without formal hypnotic induction procedures, when subjects convert the suggestions into self-suggestions. (p. 2)[17]

Along this same line, suggestions from another person, whether they be therapist or teacher do not affect the listener "unless he or she attends to, accepts and internalizes the suggestions... all suggestions, when effective, can be viewed as self-suggestions." (p. 2)[18]. Note how this fits in with Lozanov and others' writings of the anti-suggestive barriers, the focusing of attention (which can partly be brought about through physical and mental relaxation), and the eventual acceptance of what the person in authority is saying. ("Learning is fun and easy".)

d) Training in using self-suggestions:

The training procedures porposed by Barber (1980) can be combined with or supplemented with other suggestions, guided imaging, role playing or role rehearsal ("see yourself writing the spelling words correctly"), covert assertion training, negative thought stopping, training in problem solving and other cognitive-behavioral procedures. The procedures he proposes, he continues, will be similar in some ways and different in other ways from other methods which use self-suggestions (Coue's autosuggestions, autogenic training, mind control, self-programmed control and suggestopedia). All have a common goal though, that of showing students how to

[17]Barber, Journal of S.A.L.T., ibid, 1980.
[18]Barber, ibid.

use self-suggestions for continuous personal growth. According to Barber (1980) these suggestions need to be as brief and simple as possible, worded positively and in an affirmative, non-doubting way (such as "I feel calm" as opposed to "I will try not to be anxious"). These statements have an indirect effect of helping break the chain of ruminating or negative thoughts. Barber asks the question:

> To what extent is the effectiveness of any set of positive self-suggestions due to the reduction of self-defeating, negative self-talk and to what extent is it due to the direct enhancement of positive self-talk? (p. 5)[18].

The Listener and Suggestive Effectiveness

In order for various suggestions to be effective, not only the communicative components of the speaker need to be considered, such as the content of the message, conviction of the speaker, his/her charisma, as well as numerous other subtle aspects of personality but also considerations of the listener. What are the listeners positive expectations, confidence in the speaker, his interests and ethical values. According to Belanger (1980), in the process of communication, both the establishment of confidence and mutual respect are important and key to whether or not suggestions can be realized or accepted. The listener's feelings, expectations, emotions and mental set up all need to be taken into consideration.

> Suggestions cannot pass if they are incompatible with the individual's ethics, culture, psychic characteristics and expectations. The experimentor will not be able to pass the anti-suggestive barriers if he does not give enough consideration to their specific subjective structures. (Lozanov, 1971, p. 259)[19]

[18]Barber, Journal of S.A.L.T., ibid, 1980
[19]Lozanov, Suggestology, ibid, 1971.

RIGHT BRAIN/LEFT BRAIN

Hemisphere Functions

Currently, especially in the past ten years, particular attention has been directed to the body of information, research and experiments dealing with the functions of the two hemispheres of the brain. Sperry (1975) and Ornstein (1973) have identified the specialized functions and specialized forms of intellect of the two hemispheres as follows:

LEFT Hemisphere (right side of body)	RIGHT Hemisphere (left side of body)
seeing in parts	seeing the whole
analytical processes associated with language, logic, mathematics, science, reason	intuitive process associated with fantasy, music, art, space orientation, spirituality
thinking sequentially	thinking simultaneously
highly verbal/sppech	mute/imagery
computer-like	synthetic, gestalt organization
reading, writing, naming	simultaneous comprehension
intellectual	intuitive/creative
analytical	emotional
dominant/controlled	receptive
complex motor sequences	spatial/musical
perception of signifant order	perception of abstract

Brain Mechanism

Not all we know about brain fuction can be answered simply by the definite separation and specialization - since this would not explain why people with severe brain damage sometimes recover lost functions completely. Lashley, in the early '30's, suggested that the brain carries out the same function in many of its

different regions. Additionally, John (1976) proposed that many of the brain functions are distributed throughout most regions, but that some regions contribute more, or are more specialized, than others for any given function. Memory, according to John (1976) does not occur in a particular location of the brain, but in the unique cell-firing rhythm corresponding to the information learned.

Important to the area of whole brain learning is recent research mentioned by Prichard (1978) done by El Roy John at SUNY in Buffalo where in his biofeedback studies he found that as new responses are being learned, special patterns of neural firings are occurring throughout all of the brain, contrary to previous knowledge and assumption. Instruction needs to be directed to the right hemisphere, the more intuitive and holistic part as well as the left hemisphere where the more logical, analytical and sorting out functions occur.

Educational Implications

In relation to the educational setting, Sperry (1975), as well as many others suggests that with the new information and concepts about the human brain, it is obvious that our educational system, and society in general, discriminates against one-half of the brain - the right hemisphere. Ornstein (1973) too suggests a need for change in the way we teach our children, having ignored the right hemisphere for a long time.

a) Whole brain learning:

Suggestopedia can be an answer to this problem in that as a system it addresses information to both halves of the

brain, using music, the arts, relaxation and a number of apparently right-brain functions along with the direction of information to the left, analytical side.

In his development of information to be shared with groups of people in the training and development field, Tom Mirambel (1980) mentioned in his presentation to the Milwaukee Chapter of ASTD that the information on left-right brain learning has implication for trainers and developers (and for teachers). He stated that trainers should develop whole brain approaches, model by their own behavior that neither half of the brain is superior, allow people to be themselves, love the metaphoric mind and respect the rational mind, nurture motivation, and consider any attempt at communication to be appropriate.

b) Teaching at both halves:

In educating both halves of the brain, he suggests presenting information simultaneously to both hemispheres, augmenting a stimulus by following it with information beamed to the opposite hemisphere, and deliberately beaming to only one hemisphere to provide practice and growth. Right brain training methods he recommends are the use of films, biofeedback learning, computer assisted learning with video display, television, music as well as holistic activities, teaching stories, art/posters, metaphoric learning, experiential learning and relaxing and meditative learning.

Schuster (1977) in an article on the problems and prospects of SALT/Suggestopedia identified the two major ingredients in suggestopedia of SALT - suggestion and whole-brain learning.

Whole-brain learning is "using a variety of techniques to get both halves of the brain involved in the learning process." (p. 160)[20]. In presenting material, according to Schuster (1977) sometimes you use music, use gestures, present material auditorily, use the arts, make jokes, have the kids write, talk, interact socially, by themselves, etc. There are many different ways of getting the material across or in and a number of ways of expressing it, using it, or getting it out where it is observable. By using more of the brain, our learning is simply more efficient.

Implications for Learning Disabilities

Now comes the question - what does all this have to do specifically with learning disabilities or children with learning problems? Pollack (1980) in her address to the Orton Society, mentioned that in the classroom, students with stronger right hemisphere abilities must compensate or in some cases experience failure and lowered self-esteem. She proposes a number of solutions: 1) one being for these students to use the right hemisphere abilities for learning a language (remember the story of Billy told earlier by Jean Houston); 2) provide these children with activities of the right hemisphere which they can excel in and feel good about themselves, and 3) the need for better and more stimulating schools. She also highly recommends using suggestopedia where both hemispheres as well as the limbic system, the seat of the emotions, are all utilized. In her many years experience with the diagnosis and remediation of dyslexic or learning disabled children, she has

[20]Donald H. Schuster, "Problems and Prospects for SALT/Suggestopedia", The Journal of S.A.L.T., Vol. 2, No's 3 and 4, pp. 149-162, Fall, 197

observed that a large percent of them intuitively turn toward activities associated with the right hemisphere. Many are talented in music, art, drama, dance, and have vivid imaginations. These observations are confirmed by a number of recent studies of children with dyslexia.

a) Research on dyslexia - right-brain bias:

A study done in Minneapolis by Francis Pirozzolo and Keith Rayner (in Ferguson, August 20, 1979) showed that dyslexia probably involves a left-brain deficity in processing words when they are part of a text rather than a right-brain inability to perceive them as a whole, as previously assumed. Their study of poor readers showed the same right-brain superiority as normal readers for the recognition of facts, but no left-hemisphere superiority for word recognition, this lack of specialization may be the key to their reading disability.

Another study by John Kershner (in Ferguson, Febr. 18, 1980) in Toronto found that poor readers did not have a deficit in spatial perception, a specialty of the right cerebral hemisphere, as earlier assumed. In that experiment, dyslexic children performed as well on visual-spatial tasks as good readers of the same age. When a poor reader uses the holistic strategy of seeing things in wholes, as in taking an impression of a whole word without the accompanying analysis, the results are full of frequent perceptual errors. Coding words holistically interferes with tasks that demand attention to internal features, and many times impaired readers fail to break down words into units suitable for speech coding, a left-brain fuction. In his experiments,

with poor readers, Kershner (1980) found that poor readers reported more correct responses from the left visual half-field (corresponding to the right hemisphere) than good readers, confirming his hypothesis of a right-brain bias. The fluent, good readers have the ability to attend to detail in the left hemisphere and since analysis precedes the holistic strategy in reading, they will succeed better than those with the right-brain bias.

A final study of dyslexia to be mentioned in this paper is the one by Witelson (in Ferguson Theme-Pack II, 1977), in which she reports that children with developmental reading difficulties may have spatial functioning represented in both hemispheres, not just the right. The redundant spatial development seems to interfere with the usual left-brain activity. Unlike the non-dyslexic subjects who showed significant differences in their ability to recognize shapes with their right and left hands, the dyslexia showed no differences. Witelson (1977) states that "bilateral representation of a cognitive process could...affect cognition by overloading one hemisphere and interfering with those functions 'native' to it."[21.1] No matter what the reason, whether it be interference or disfunction in the left hemisphere, this could lead to predominant use, wherever possible of the right - spatial, parallel, holistic mode with which dyslexics appear to have no difficulty.

b) Personal account of a dyslexic:

In conclusion of this section on right-brain/left-brain learning, Marilyn Ferguson, editor of Brain/Mind Bulletin in

[21.1] Reference unavailable at time of writing.

her review of Eileen Simpson's biography - Reversals: A Personal Account of Victory Over Dyslexia - states that this:

> "vividly written, deeply moving story has implications far beyond the author's account of her own severe dyslexia, the difficulties she had in adapting to a literate world and her desperate struggle to hold onto a healthy self-image." (August 20, 1979[21.2]

The implications, as one would imagine, are for our educational system with its continued emphasis on linear thought, symbolic language and symbolic mathematics and its apparent lack of recognition and development of that minority of students who have a strong holistic perceptual learning, who many times are unusually creative, fluent, imaginative, artistic or athletic (again the author is reminded of the fantastic story of Billy).

> Perhaps the time has come for the concept of human rights to encompass those whose very experience of the world has been denied, who are tramatized by the educational system into incompetence or dropping out, who lose their very identities in trying to fit into the dominant cognitive style...there is an element of Eileen in each of us - perhaps lost or suppressed by an enculturation that reduces things to their parts and has little use for dreaming and imagining. Reversals is a doorway into other selves - and the other self of each of us. (p. 4)

21.2Marilyn Ferguson, "Dyslexics' Right-Brain Bias: Seeing Wholes, Not Parts." Brain/Mind Bulletin, 4(19), August 20, 1979.

[22]Ferguson, ibid, Brain/Mind Bulletin, ibid, 1979.

CHAPTER VI - HYPNOSIS, HYPNOTHERAPY ACADEMIC ACHIEVEMENT AND SUGGESTOPEDIA

INTRODUCTION

In the literature about suggestopedia (and the American adaptation, SALT) and hypnosis, it is pointed out that there are a lot of similarities of the two systems. Some writers say there's hardly a line which divides them (Stanton, 1978) while others say that the Lozanov method of teaching foreign language has nothing to do with hypnosis.

Definitions

With those statements in mind, definitions are in order, and that's where part of the problem lies. Hypnosis is defined in many different ways, partly on what the subject reports, partly on observable behavior, and partly on conjecture. In a pamphlet advertising the services of a local hypnotist, the AMA definition of hypnosis is given.

> Hypnosis is a temporary condition of altered attention, within which a variety of phenomena may appear spontaneously or manifest themselves in response to verbal or other stimuli [1.1]

Simply stated, susceptibility to suggestion is increased in hypnosis and as such hypnosis can be considered as a "learning process". Through various means, one can learn to be more susceptible to suggestion, one of those means is called "hypnosis" another is called "suggestology".

Another way of describing hypnosis is by the observation of certain behaviors. In her study of the use of hypnosis with young children, Gardner (1977) elaborates on four basic

[1.1] "Hypnosis is Nothing New", ibid.

behavioral observations: 1) a quiet, wakeful behavior following soothing, repetitive stimulation; 2) involvement in vivid imagery; 3) heightened attention to a narrow focus with alterations in awareness; and 4) the capacity to follow post-hypnotic suggestions.

Hypnosis with Children

In her fascinating study of hypnosis with infants and pre-school children, Gardner (1977) quotes Morgan (1973) as stating that "it is possible that all people are born hypnotizable, but that the demands of reality on the maturing personality discourage the freedom of imagination which our society encourages only in children."[1.2]

a) Uses:

Richard Sarles (1975), a physician and Director of the Child Psychiatry-Pediatric Liason Service at the University of Maryland School of Medicine writes of the uses of hypnosis with children, especially children who are hospitalized. Hypnosis has been used for many years for the treatment of a variety of psychological and medical problems, such as enuresis, encopresis, tics, stuttering, pain, fears, etc., and as an adjunct to psychotherapy with children.

In her work with children, Gardner (1978) has found hypnotherapy to be acceptable and intriguing to most children,

> rarely produces complications, permits specific focus on the problem, allows the child to control his own treatment, and usually produces lasting results in a short period of time without symptom substitution. (p. 840).[2]

[1.2]Gail G. Gardner, "Hypnosis with Infants and Preschool Children," The American Journal of Clinical Hypnosis, 1977, 19(3), p. 158-162. A. H. Morgan, "The Heritability of Hypnotic Susceptibility in Twins, Journal of Abnormal Psychology, 1973, 82 pp. 55-61.

[2]Gail G. Gardner, "Hypnotherapy in the Management of Childhood Habid Disorders, Journal of Pediatrics, 1978, Vol. 92(5), p. 838-84

Producing results in a short period of time is especially important in the breaking up of the cycle of feelings of failure, frustration, anxiety and the build up of defense and coping mechanisms mentioned earlier as part of the problems involved in working with the learning disabled.

b) Reasons for high susceptibility:

Most children are more hypnotizable than adults (Ambrose, 1968) and ages for greatest susceptibility for hypnotizability are from six to twelve, with it decreasing somewhat in adolescence (London, 1962). It has also been found that there is no sex difference in hypnotizability in the five to sixteen year old age group (Cooper and London, 1966).

There are a number of reasons why children are more hypnotizable than adults, and many are the same or similar reasons given for the use of suggestopedia with children. Reasons are that children are -

1) more flexible with their minds, less rigid;

2) more readily use fantasy and are highly imaginative;

3) seek and accept help from adults readily;

4) more ready than adults to enter into a relationship of trust and closeness; consequently having little or no conflict over issues of control; are open to new experiences; and are driven by a desire to master new skills (this is particularly obvious in the school setting);

5) they have limited reality testing, use "magical thinking", are willing to experience regressive states (how many times do we see young children enjoying playing "baby" during free play);

6) they can move quickly from one feeling state to another.
(Sarles, 1975)

All of the above reasons contribute to the child's increased hypnotizability. Some common examples seen in family or home life are the use of stroking, rocking and talking softly and quietly to a crying infant to help them become more content and comfortable. Another example is the use of "magic kisses" given to an injury to help relieve pain in a hurt or injured child along with the calm, soft and sympathetic voice of parent or teacher. Sarles says humorously that this produces "hypnotic analgesia which has relieved more pain, more quickly and with more universal results than all the analgesies known to medical science." (p. 36).[3]

c) Effectiveness, failure:

In yet another article, Gardner (1974) discusses quite extensively the many variables which affect the use of hypnosis with kids. These are patient variables (cognitive, emotional and interpersonal factors), parent variables; hypnotist variables; and situational variables. She goes on to cite certain situations which contribute to the maximum effectiveness of hypnosis with children: 1) maximum cooperation of parents and other adults significant in the child's life (the children generally have no difficulty cooperating); 2) appropriate induction techniques depending on the age of the child; 3) adapting treatment techniques, being able to use such ones as concrete suggestions, imaginative techniques, regressive techniques, ego-strengthening techniques and self-hypnosis.

Gardner (1974) so well puts it that the real question is not so much whether or not a child is hypnotizable, but,

[3]Richard Sarles, "The Use of Hypnosis with Hospitalized Children", The Journal of Clinical Child Psychology, Fall, 1975, pp. 36-38.

> whether or not he is hypnotizable by a particular hypnotherapist having a particular relationship with him and his parents and using a particular technique for a particular purpose. The closer we come to this kind of sophistication, the more likely it is that we will be using hypnosis with children less as a last resort and more as a first resort. (p. 36)[4].

Sarles states that the most common reason for the failure of hypnosis with children, especially given all the reasons why children are so much more susceptible than adults, is the thereapists' inability to adapt to the mentality of the child in the cognitive, emotional and experiential areas - in other words allow himself/herself as therapist to think, feel and experience as a child, allowing their own childlike behaviors and feelings to come to the surface.

d) Indications, counter-indications:

As has been concluded by others, Sarles states that hypnosis should be used as part of a treatment plan in working with children and is a reliable, helpful and well-established technique which can be used for a wide variety of physical and emotional disorders of childhood and adolescence.

As with Gardner, Ambrose says that hypnotheraphy continues to be the method of choice in the anxiety problems of childhood. It also proves worthy in the area of psychomatic medicine and can never be dangerous to the health or life of the child.

Krippner (1971), too, emphasizes the importance of using hypnosis in collaboration with other methods and techniques, and with some children, hypnosis is not indicated as the most appropriate method to use.

[4]Gail G. Gardner, "Hypnosis with Children", The International Journal of Clinical and Experimental Hypnosis, 1974, 22(1), pp. 20-38.

Kaffman, too, states that although the average child can learn how to relax and quickly and easily accept suggestions given by a hypnotist, "an exception to this rule is the group of hyperkinetic brain damaged children who are bad hypnotic subjects." (p. 725)[5]. This is because as a rule they are characterized by exceedingly short attention spans, restricted capacity of abstract thinking and their distractibility. What is suggested by Jacobs (1966) is that this be considered as one of many diagnostic tools in determining the possibility of brain damage in a child who is unable to achieve a trance state. This author proposes that, instead of dismissing the use of hypnosis for those reasons, maybe what first needs to be done is to find out whether or not these children would be open to suggestions which are designed to lengthen their attention span, and help them concentrate and control their impulsivity. (See Nall, Kwako and Mantione) Barber (1980) in his article on self-suggestions deals with each of those areas, not with children, but with college students with a great deal of success. (Additionally, "trance" states may not even be necessary to accomplish the goals of the therapy.)

e) Training:

If hypnosis is reported to have such great success as an educational tool, what accounts for its lack of more frequent use in the classroom? According to Krippner, it is not because of lack of student interest, but rather the lack of trained personnel. Training would involve in his estimation a sound

[5]Mordecai Kaffman, "Hypnosis as an Adjunct to Psychotherapy in Child Psychiatry," Archives of General Psychiatry, 1968, Vol. 18, pp. 725-738.

knowledge of educational psychology in addition to a solid background in hypnosis. The psychological and physiological concomitant of particular educational concerns must also be understood by the prospective hypnotist. Membership in either of the two recongized national professional organizations for people using hypnosis in their work is strongly suggested.

HYPNOSIS AS AN EDUCATIONAL TOOL

Rationale, Variety of Uses

Krippner (1970) cites various studies he had done using hypnosis for problems in study skills and work habits; concentration and attention problems; elimination of certain behaviors, such as test anxiety; motivation and interest; and for deficient language skills. He states that all of these areas soften handicap children who have become reading disability cases. Educational hypnosis should be part of a comprehensive psychotherapeutic program, though, if there are serious emotional disturbances lying behind the previously mentioned problems.

Following that are some disturbing comments by Ambrose (1968) referring to anxiety and phobic problems which are serious hazards to the progress of the student. "If guilt, fear, anxiety, the need for punishment and other unconscious emotional needs can be controlled and eventually eradicated and the child's intelligence freed, the intellect can more readily cope with learning." (p. 2)[6].

[6]Gordon Ambrose, "Hypnosis is the Treatment of Children", The American Journal of Clinical Hypnosis, 11(1), July, 1968, pp. 1-5.

In his work, he has found that although very often the same effect can be achieved with or without the use of hypnosis, hypnosis appears to release tension and these relaxed feelings (children describe as sleepy feelings) "give rise to a more confident and more certain attitude of attention, concentration and effort". (p. 2)[7] He strongly suggests that auto-hypnosis be taught which can be easily and instantly understood by the child.

Kaffman (1968), too, agrees that hypnosis is a good method to use with children, especially in relation to breaking the viscious cycle of symptom - lack of confidence - anxiety - symptom. This is particularly important in relation to the setting of learning problems and some of the companion behaviors.

In another article, Krippner (1971) comments on the fact that because suggestion is a frequent concomitant of the teaching process, that without being aware of it, many educators have used some form of hypnosis in what were probably many of their most successful teaching efforts (and this author might add, knowing the power of negative suggestions, hypnosis was probably part of some of their worst disasters!).

Cases and Studies

a) Krippner - Spelling, relaxation, study habits:

Krippner (1970) discusses the importance of the use of hypnosis as an educational tool, and that some "hypnotic" techniques are already in use in the schools - such as suggesting the class relax before an exam or the coach giving the team a pep talk, etc. One of the studies cited on the use

[7]Ambrose, The American Journal of CLinical Hypnosis, ibid, July, 1968.

of hypnosis with children with learning problems was the study Krippner (1966) did at a reading clinic during a summer remedial reading program. Hypnosis was used with nine of the forty-nine children attending the clinic to help in the areas of decreasing tension, increasing motivation, fostering interest in reading, maintaining attention and concentration, as well as facilitating the revisualization and reauditorization of graphic and spoken symbols (used in spelling).

Krippner (1970) shows how with the use of the Radaker technique (1963), revisualization is used for children having problems with spelling errors. He also combines reauditorization and clinical hypnosis to assist the poor speller. A very interesting account of the teaching of the word "car" follows in his article. The children are asked to see the letters on a big movie screen, feel the letters being traced on their forehead and then listen for the sound of the word "car" in the back of their mind. This is very much like the passive stage of the presentation of spelling material seen and heard by the author in Jean Taylor's remedial reading class where the children were told to see themselves writing the words on their magic board.

Results showed that those who received hypnotic treatment performed significantly better than those who did not. Median improvement for the whole group was five months' reading advancement during a five week period of time. Of the nine children treated with hypnosis, eight were above the median and one below. Of the non-hypnotized children, 16 were above the median and 24 at or below.

Krippner goes on to mention different statements he uses for the young child who is exhibiting poor study habits and for the youngster who needs to relax while studying for a test. The later has a number of references to the relaxation of the muscles in the eyes while at the same time keeping the eyes open. Krippner (1971) mentions, and this is particularly important in the area of learning problems, that this reference to vision reflects findings that many disabled readers have poor visual skills and that "in many of these cases, acute anxiety lies behind the blurred perception!" (p. 8)[8]. He mentions a particularly remarkable example of a client attempting to recite words from a basic word list. The client initially missed 17 out of 20 words. It was suggested to him, under hypnosis, that the second time reading them he would be more successful because his eye muscles would relax, his eyes would be "wide open" and he would be able to see "all the letters in each word". Upon reading the second time, the client only missed five of the twenty and only seven of a new list of twenty different words.

b) Jampolsky and Haight - Reading problems:

Gerald Jampolsky, a psychiatrist and director of the CHILD Center Annex (Childhood Help in Learning and Development) and Mary Ellen Haight, a research assistant at the Center, write of a special technique being used successfully at the Center for children with reading problems (1975). It is described as a a specific suggestive technique in which use is made of suggesting

[8]Stanley Krippner, "Hypnosis as Verbal Programming in Educational Therapy", Academic Therapy, 1971, 7(1), pp. 5-12.

a particular visual picture as well as a kinesthetic picture (feeling imageries). In using this technique, the picture becomes a predetermined reality. "Pictures people have of themselves determine behavior far more than an idea they have of themselves." (p. 333)[9]. Although not described as either hypnosis or suggestopedia, it has some of the same characteristics - muscle relaxation, use of mental imagery, replacing old negative thoughts and pictures with new and more positive ones. These new images are given to the unconscious. The new images are what determine behavior, not the conscious thought process.

The authors go on to describe the case of John, a young student who is bored with reading and has a rather passive, resistive attitude toward learning to read. Various techniques have been used prior to his coming to the Center, none having been particularly helpful in the long run. All parties involved, the child, his parents and his teachers are experiencing the vicious cycle of negative feedback accompanied with the loss of self-esteem.

When tested, John was found to have skills at a fairly high level - something John "seemed determined to deny, chosing to explain the high scores away, while at the same time wanting to believe they were that good." (This sounds reminiscent of the story of Charles Gritton's student he was tutoring in spelling.)

[9]Gerald G. Jampolsky, Mary Ellen Haight, "A Special Technique for Children with Reading Problems", Academic Therapy, 1975, 10(3), pp. 333-337.

This is also similar to the anti-suggestive barrier which Lozanov refers to as the critical-logical barrier to suggestion. According to the tester, although John's academic skills were excellent, "he was so turned off to reading and so sure of his own disability in comprehension that it was almost impossible for him to succeed." (p. 335)[10].

It was decided to use the suggestive technique with John, and it involved these steps:

1) becoming relaxed, feeling and seeing his muscles relax;

2) feeling and seeing himself become more relaxed as he is imagining himself going down an elevator;

3) seeing a picture of himself and having a feeling imagery of himself being with his teacher enjoying and getting pleasure out of reading;

4) seeing himself gaining confidence as well as seeing and feeling his skills begin to increase;

5) taking that picture of himself into his blood cells and allowing it to be carried to all part of his body;

6) being given information about the use of auto-suggestion and using it then following Steps 2 through 5;

7) being suggested that he use auto-suggestion for five minutes each night.

In a comparison of test data of before and after treatment, John doubled his performance in both speed and accuracy. He also now reads with enthusiasm, answering all inference questions correctly. After a two week period of time during which he attended summer camp, John returned to the Center remembering the entire story and where he was in his book. He was still enthusiastic about reading, his comprehension was excellent, and his behavior had changed radically.

[10]Jampolsky, Haight, ibid, Academic Therapy, ibid, 1975.

As a result of that study, it has been decided by those at the Center to do more extensive research using the suggestive technique mentioned and eventually demonstrate the easy availability of this method to children, teachers and parents.

c) Willis - Reading rate and comprehension:

A very interesting study by Donald Willis (1972) points to the importance of suggestion in his experiment on the effect of self-hypnosis on reading rate and comprehension. Forty highly susceptibles were randomly divided into four groups, with the reading rates and comprehension of each group being measured before and after treatment. One group was treated with self-hypnosis and reading suggestions; group two was given examiner-administered hypnosis and the same suggestions; group three received only the suggestions; and group four received no treatment.

The hypothesis was that both kinds of hypnosis would significantly facilitate the expected incremental effect of the suggestions on reading rate without lowering comprehension. The results, however, indicated that neither type of hypnosis had a measureable facilitory effect on the suggestions, although the suggestions produced the expected incremental effect (p. 249). Since there was no significant differences between the sizes of the increases of reading rates of the three treatment groups, it could be postulated therefore that suggestions alone were just as effective as suggestions combined with hypnosis. This is corraborated in the findings of Barber (1965) mentioned

earlier in which he contends that hypnosis offers nothing unique to the learning situation. He has also demonstrated that the major phenomena of hypnosis can be shown equally well with or without a hypnostic induction or trance state and that the only intrinsic difference is one of methodology.

Williw (1972) suggests that future research concern itself with the varying of the number and duration of practice sessions and testing the comparative effects of different kinds of suggestions and practice techniques.

A variety of others have used hypnosis with different populations, and reports vary on the effectiveness or ineffectiveness of hypnosis. Barber (1965) as quoted in Krippner (1970) criticizes most of the experimental studies of learning and hypnosis by stating that the investigators confound two independent variables - one of the "hypnotic trance state" and the other being suggestions intended to elicit a high level of performance. His criticism is that:

> The possibility was not considered that S's might have performed as proficiently under a waking condition as under the 'trance' condition, if suggestions for enhanced learning and recall had been given under both condition. (p. 452 in Krippner, 1970)[11].

d) Jampolsky - Sensory motor stimulation with number reversals:

In another article by Jampolsky (1970), he describes a technique of a combination of hypnosis and sensory motor stimulation to improve a problem of number reversals in a group of children with that specific learning problems.

[11]Stanley Krippner, "The Use of Hypnosis and the Improvement of Academic Achievements," The Journal of Special Education, 4(4), 1970, pp. 451-460.

Jampolsky (1970) devised a technique which could be carried out in a short time, partly because it was hoped that this would decrease the level of anxiety, "with the result that the ego and perhaps learning ability in other areas might show improvement." (p. 29)[12]. This was based on findings that unsuccessful lengthy tutoring can then lead to extreme frustration, a decrease in self-esteem and conceivably affect other areas of learning.

Jampolsky chose to use a tactile and kinesthetic approach for learning with number reversals on the premise that the reversals likely were based on some kind of visual perceptual problem and that the use of sensory modalities other than visual would be wise. He chose to use hypnosis for both the reduction of the child's anxiety and the heightening of his awareness of sensory and motor systems other than vision.

Instead of using the many times successful technique of having the child close his eyes and see a TV image, he felt this to be inappropriate for children with poor visual imagery. Instead, he used tactile images of fur and kinesthetic images of an imaginary weight tied to the arm and an imaginary balloon tied to the other arm, and an imaginary wind blowing the student into the author's arms. A post-hypnotic suggestion was given that the student would learn to write his numbers by "feeling" them, rather than seeing them.

This phase was followed by instruction using touch, muscle, memory and vibratory approaches. Results showed that after the

[12]Gerald Jampolsky, "Use of Hypnosis and Sensory Motor Stimulation to aid Children with Reading Problems", Journal of Learning Disabilities, 3(11), November, 1979, pp. 29-34.

initial session of hypnosis and two weeks of specific teaching procedures, five children in an experimental group had the total number of reversals reduced from an initial 10 to zero. For the five children in the control group who had no hypnosis or special training, number reversals increased from a total of 8 to a total of 13 over a two week period. All the children involved, through neurological and psychiatric examination had learning disabilities which could be considered developmental, presumably resulting from a maturational lag of the nervous system.

Jampolsky did state some defects in the pilot study with suggestions for change. The number of subjects was small, experimental period was short, and there were a variety of procedures being used which made it difficult to determine which of them, or what combination would be sufficient to help children correct their number reversals.

It is postulated that this particular population of children had a developmental learning disability resulting from a maturational lag of the nervous system and that possibly, conceivably the type of sensory stimulation used (vibratory, motor and touch sensations) might enhance the maturation of the perceptual apparatus as well as alternative pathways to vision for supplying information to the brain. (Jampolsky, 1970).

Conclusions

Krippner (1970) concludes by stating that:

> clincial reports indicate the possible utility of hypnosis in ameliorating students' study problems, improving concentration, reducing test anxiety, increasing motivation, and facilitating the learning of specific language skills...It does merit greater consideration by a society committed to the maximum development of the talents and skills of its citizens. (p. 459)[13].

HYPNOSIS AND SUGGESTOPEDIA SIMILARITIES AND DIFFERENCES

The technique suggested by Sarles is similar in some ways to that used by Jampolsky and Haight (1975), for reading problems and by SALT teachers. Similar to what is categorized as "preparation" phase in suggestopedia and the creation of a positive suggestive atmosphere, Sarles mentions a number of things to be done before initiating the actual hypnosis. Areas of importance are the relationship of the subject and the hypnotist (rapport, trust, authority and infantilization of suggestology), the timing in an overall treatment plan, the flexibility of using various induction techniques (also stressed in suggestopedia to avoid boredom), using the child's own suggestions (i.e., suggestopedic use of suggestions for learning easier, faster, more efficiently and remembering material better and longer), and adapting to individual differences (See Taylor and Prichard on their adaptation for the remedial reading setting and the need for more extensive physical relaxation and positive self-statements). Other

[13]Krippner, The Journal of Special Education, ibid, 1970, p. 451-460.

preparation items are to share the reason for the use of hypnosis, what will happen, why its being used, dispel any myths the child might have about its use (in suggestopedia, citing previous research of accelerated learning, reports of previous students etc.) and telling the child that "hypnosis" is aimed at strengthening his wishes and adding power to his desire to change things which may be disturbing." (p. 37).[14] He stresses too that the child can learn how to use hypnosis himself/herself.

Salres (1975) stresses the importance of assuring the child that hypnosis will not put him to sleep. This is because of all the emotions stirred up around "separation anxiety" at bedtime. This seems to also be related to what he later cites as the child's general resistance to eye closure and tendency to open their eyes frequently during hypnosis (Moore and Lauer, 1963). This brings out a side issue having to do with the criteria used by Prichard and Taylor (1978) in determining which children were more successful with the relaxation technique and also used by Nelson for determining the effectiveness of relaxation (mind-calming and visualization exercises). Evidently, eye closure possibly should not be used as criteria in this case. Sarles goes on to state that it is important that the child know that they can open their eyes at any time if they wish to and that eye closure not be used as a test of suggestibility or as a challenge technique with children.

[14]Sarles, ibid, The Journal of Clinical Child Psychology, 1975.

Before actual induction, Sarles engages the child in some "games" of arm levitations. The magical aspect of this game helps to engage the child's curiosity and interest and makes him more susceptible for suggestion and induction. Likewise, creating a positive, supportive suggestive atmosphere by the use of the six basic elements (authority, infantilization, double-planeness, rhythm, intonation and passive concert like setting); creating a sense of joy of learning, relieving tension as well as addressing both the conscious and unconscious using both verbal and non-verbal communication set the stage for suggestibility in the suggestopedic system.

Sarles suggests general muscular relaxation, hand levitation and the "television technique" as some of the most popular and successful methods for induction. With the exception of hand levitation, these are similar, if not identical to the progressive muscle relaxation, mind-calming, and visualization exercises used in SALT - particularly the one asking the child to write words on their magic blackboard (similar to seeing a word on the television screen or the movie screen of Jampolsky). On the television screen, the children are to see different pictures appearing. These can be used to strengthen feelings of self-worth, confidence, competence and trust, just as Jampolsky and Haight (1975) have the child see himself/herself enjoying the pleasure of reading, seeing himself/herself feeling more self-confident and increasing in skills or as Krippner (1970) has the child revisualize a word and the early pleasant learning recall of SALT.

Other Similarities and Differences

a) Waking State:

In the continued question over whether or not suggestopedia is or is not actually hypnosis, a number of people, both users of and observers of both or one of these techniques have commented on the similarities and differences. Schuster, in a talk in Madison in 1980, says one of the distinctions is that although both systems use suggestions, all suggestions are in a waking state in suggestopedia, they do not bring about as much an altered state of consciousness and are not given in the formal hypnotic suggestive method. He further states in the manual (Schuster, Bordon and Gritton, 1976) that although there are lots of suggestions used, there are also lots of game playing, lots of fun, pretending at being a kid again, and a variety of physical and mental exercises. Philipov (1977) also states that the individual is wakeful, not somnolent, has no sense of "going under", has heightened memory as opposed to post-hypnotic amnesia; suggestions are given in a monotonous tone in hypnosis, whereas in suggestopedia they are given in the total environment, with a background of music, varying intonation and rhythm of presentation; and last, that the student has conscious control yet uses unconscious functions. In another context, Bordon (1977) states that:

> "hypnosis is nothing but a heightened state of suggestibility...If the belief systems in the students are stimulated enough, then they are going to achieve things that they normally think they cannot achieve because of built-in automatic barriers." (p. 155).[15.1]

15.1 Reference unavailabe at time of writing.

In previous citations, Barber has stated that the phenomena attributed to "hypnosis", such as the "trance" state, somnolence, feeling of "going under", and post-hypnotic amnesia can all be achieved without calling the situation "hypnosis", and that all of these are suggestive behaviors.

b) Access to the unsonscious:

In her article, Pollack (1979) states that Lozanov, a psychiatrist who has used hypnosis in the '50's and '60's has studied the potency of suggestions under conditions defined as hypnosis as well as in the conscious state. He found that under certain conditions suggestion on a conscious level can be just as powerful and has the capacity of calling forth the reserves of the unconscious. "The unconscious psychic activity within which suggestion takes place is at hand during all and any states of the individual - states of wakefulness, sleep, hypnosis, gloom, etc." (p. 19)[15.2]

c) Special state:

On the other hand, Barber, Spanos and Chavez (1974) challenge the traditional theory of the existence of a special state - "hypnotic trance" - and that what is supposed to happen in that state as far as behaviors is misleading.

> From our viewpoint, subjects carry out 'hypnotic' behaviors when they have positive attitudes, motivations, and expectancies toward the test situation and, consequently, when they are willing to think and imagine with the themes that are suggested. (p. 6)[16].

15.2 Pollack, ibid, Journal of S.A.L.T., ibid, Spring, 1979.
1 Theodore Barber, N. Spanos and J. Chavez, Hypnotism, Imagination and Human Potentialities, New York: Pergamon Press, 1974.

d) Rhythm:

An interesting aide in this whole question of whether or not suggestopedia is actually "hypnosis" or not is that two hypnotists, Cooper and Erickson, researched the effects of rhythm on body and mind function in the '50's. What they found is that the 60 beats per minute rhythm with 8 to 10 second activity cycles vastly accelerated learning and creativity by expanding a person's time perception and that a learner can do this same thing without the use of hypnosis. The beat apparently slowed down body and mind rhythm so the individual felt as if they had more time to accomplish tasks as actual clock time (Ostrander, 1979). What is interesting is that the research was done by two hypnotists, the effect of accelerated learning can be accomplished without hypnosis and this is the same method used in the passive section of the suggestopedic presentation phase. (The musical background is 60 beats per minute and the material is presented in 8-second intervals with the students breathing synchronized to the 8-second cycle!)

e) Cross-overs:

In a personal communication with Dr. Barber (1980), he states that the Lozanov procedure does, in fact, overlap markedly with the hypnosis procedures. "As you know, 'hypnosis' in therapeutic settings typically includes relaxation instructions, imagery and positive suggestions given either directly or indirectly. These components are also found in the Lozanov procedures."[17]

[17]Theodore X. Barber, Personal Communication, 1980.

Stanton's Comparison

These comments are further elaborated on by an extensive comparison by Harry E. Stanton of the University of Tasmania in his article "Suggestology or Hypnosis - It's All in the Label." That in itself sets the tone for his comments. As a hypnotist himself, he states that what is most important is suggestion, rather than some state of mind labelled "hypnosis", which seems key in hypnotherapy. (Stanton, 1978).

a) Importance of suggestion:

Stanton quotes Gindes (1973) in a statement which seems to sum up much of the confusion and diversity of thought:

> When all available data on scientific hypnotism have been examined, one fact looms large, unescabale and inevitable: vis., Suggestion causes the hypnotic state, suggestion is the vehicle upon which all hypnotic control travels, and suggestion is the most effective means of rousing the subject. In other words, the entire procedure of hypnosis, from induction to awakening, is founded upon suggestion. (p. 175)[18]

That certainly fits what has previously been said about suggestion being universal and how powerful suggestion can be and is.

b) Stage One - preparation:

Stanton (1978) proceeds to make a stage-by-stage comparison of suggestopedia and hypnosis. The first stage

[18]Jerry E. Stanton, "Suggestology or Hypnosis - It's All in the Label.", The Journal of S.A.L.T., Winter, 1978, 3(4), pp. 248-252, quotes from B. C. Gindes, New Concepts of Hypnosis, Hollywood, California, Wilshire, 1973.

is preparation, which has two aspects - the creation of a positive expectancy and the relaxation of the mind and body. In suggestopedia, positive expectancy is accomplished by convincing the students, by the use of various statements, that their learning will be more efficient and more pleasant than it has been in the past. In hypnosis, positive expectancy is established by the creation of rapport, and the hypnotist conveying his belief that the hypnotic treatment will be successful. The second part of preparation, that of physical and mental relaxation, is accomplished in suggestopedia by using Zen breathing and Hatha yoga techniques, imaginative meditations, early pleasant learning recall and the re-experiencing of those feelings. This relaxation is accomplished in hypnosis by almost identical techniques in which the clients are to see themselves as they want to be with the suggestion that they can be like that. The subjects are asked to remember a past successful experience when they went beyond what they originally expected of themselves. They are sometimes shown how to relax as well as suggested to create a rest haven or place of relaxation in their imagination.

c) Stage Two - Presentation:

The second phase, presentation, also has a number of similarities. Although there is no direct equivalent to the active stage of the presentation phase, there are definite parallels to the passive. During the passive stage, students/patients are requested to relax and be introduced or re-introduced to the material. In suggestopedia, students are asked to watch their breath and turn off distraction,

relax and listen to the music in the background, as if at a concert, not needing to pay particular attention to the material being represented. The material is presented at about the same volume as the music and is synchronized with both the breathing and the music. In hypnosis, for comparison, patients are asked to create a different world in their mind and sort of park the "real" world for awhile. While relaxed in this fashion, the patients' resistance to suggestions is lowered (as in the leaping of the anti-suggestive barriers of suggestopedic teaching), and he is often given a task which serves to keep his conscious mind busy (such as counting backwards from 300) while the hypnotist states the suggestions which are designed to help the patient. Both the music of suggestopedia and the counting backwards of hypnosis are diversionary tactics or distraction techniques so that the student/patient will absorb the material subconsciously (where Lozanov says the reserves of the mind for accelerated learning exist).

d) Stage Three - practice:

The third phase of suggestopedia, the practice phase is basically non-existent in hypnosis, unless it is the socio or psychodrama segments of group therapy.

e) Summary:

Stanton, concludes by summarizing the similarities of suggestopedia and hypnosis by saying that each has these three important elements - relaxation, positive suggestion and imagery and that the claimed differences between the two lies only in the label or name each uses.

> It is easy to believe that something is different because we label it differently, but the same phenomenon do seem to be present in suggestology and in hypnotherapy. Perhaps it would be more helpful for us to recognize this situation rather than to attempt to create distinctions which are more apparent than real. (p. 252)[19]

[19]Stanton, ibid, Journal of S.A.L.T., Winter, 1978.

CHAPTER VII - TEACHER CHARACTERISTICS AND TEACHER TRAINING

INTRODUCTION

From the body of information already presented about the Lozanov method, it would be correct to assume that the suggestopedic teacher is one very unusual and special person. This next section deals with the characteristics mentioned by many of the writers of what makes a good teacher as well as the kind of training one goes through to become a suggestopedic teacher.

At the Second International Conference in April of 1977, Schuster (1977) asks what kind of a teacher we need. "We think you need a teacher who has an open, direct, honest, integrated approach in his two planes of communication." (p. 152)[1] Being an expert in your subject matter is vital and you also need some supplementary training in the arts - drawing, playing an instrument, singing, etc. Not knowing for sure, though, what makes up a good teacher, he then poses the question: "Can anybody learn to be a suggestopedic teacher?" Originally, it was proposed that anyone could learn to be a suggestopedic teacher, some in the two month basic teacher training course in Sofia while others took longer - as long as one year for some. Current thought is that although one can go through the mot ns - taking the courses of training, etc., and understand all the concepts - not everyone can learn to be a good suggestopedic teacher.

[1]Schuster, ibid, Journal of S.A.L.T., ibid, Fall, 1977,

TEACHER CHARACTERISTICS

McCoy (1977) in her article on suggestology, summarizes and paraphrases very well the 13 talents of the teacher as recommended by Krasimira Pashmakova, director of teacher training at the Suggestology Institute, Sofia. They are as follows:

1) Singing and acting ability are useful, though not absolutely necessary;

2) An ability to tap student reserves, particularly of those who feel inferior;

3) Knowledge of psychotraumatic causes which might make students lost self-confidence;

4) Mastery of two-plane behavior to aid students;

5) Familiarity with students and their relationship and talents;

6) Avoidance of situations which might cause students to feel awkward or that the teacher is in too superior a position (hautiness);

7) The instructor's maintenance of a balance between closeness and distance in relations with the students;

8) Making the students feel at ease, protected and self-confident;

9) Knowledge of how to correct a mistake. Kindness should not be excessive or the students will lose confidence in the teacher;

10) The teacher should possess enough self-confidence and skill to act natural and avoid artificial behavior;

11) A positive, suggestive atmosphere must be created to convince the students that learning is fun, easy and efficient, and that they will retain the material for a long time;

12) A positive atmosphere must be maintained at all times;

13) The teacher must be able to visualize the material being read and project it into the minds of the students, who, as is the teacher, are in the alpha state.

As mentioned earlier in this essay, Prichard (1978) stresses the importance of the acceptance and understanding of the powers of suggestion and that suggestions come from everywhere. In the classroom situation they come from teacher verbals, teacher non-verbals (body language), classroom decor, lesson materials, activities, peer suggestions ("Boy, this is fun"), and within-student suggestions and both the conscious and unconscious levels of mind (self-statements). The impact of suggestion is inescapable, and the good suggestopedic teacher is acutely aware of this and uses it effectively, taking control of the avenues for suggestion.

In his book, Lozanov (1978) himself discusses not only the preparation of the teacher but also of materials and other components of the suggestopedic teaching method. As mentioned by Schuster (1977) earlier, expert knowledge of one's subject is extremely important, not only for conveying the image of "authority" but also that according to Lozanov the teacher must in some cases work off the cuff, being able to overcome the internal resistence and the influence of routine which so much characterizes the typical, conventional classroom. Additionally, the teacher must prepare or arrange for the preparation of art work such as posters, appropriate readers and text books; form a small musical theatrical ensemble to introduce new sections of

material; divide material into large, meaningful global units; prepare scripts and music for theatrical performances; be familiar with and trained in the understanding of the use of preclassical and classical music; and elicit parental support and cooperation so that the parents' comments at home will be of a positive and supportive nature.

Other comments by writers of the Lozanov method say in their own ways what some of the characteristics are of a good suggestopedic teacher. "The teacher - performer, instructor, therapist, supporter - is authoritative yet never threatening." (Brain/Mind Bulletin, 1977); the teacher is "a sensitive, caring manipulator - in the positive sense of manipulating" (Bordon in Brain/Mind Bulletin, 1977).

> The teacher never criticizes, never specifically tells the student he is wrong. Corrections are made obliquely, for example, by giving a correct pronunciation of a word in the context of another sentence. (Brain/Mind Bulletin, 1977)
>
> Two elements are very important...one is being a positive person, the other is seeing through the learning blocks to the potential within each person (Somsky, 1980)[2].
>
> A totally positive person, i.e., a person who has natural propensity to discover good qualities in every student (Gritton, 1979).
>
> Communicates an integrated, consistent message at conscious/subconscious levels and verbal/non-verbal levels (Schuster, Bordon and Gritton, 1976)[3].
>
> Bring in interesting films, do crazy things to dramatize the material (Schuster, 1980)[4].

[2]JoLene Somsky, "Teaching with Love", Newsletter of The Society for Suggestive-Accelerative Learning and Teaching, 5(1), 1980.
[3]Schuster, Bordon and Gritton, 1976.
[4]Donald H. Schuster, Informal presentation made to a group of interested teachers and psychologists in Madison, Wisconsin, February, 1980.

> The teacher's concern for the students and his ability to build up the morals and group feeling of the class and to give the students a sense of self-worth (Belanger, 1978)[5].

> I grew to expect the successful results I was getting. This was important, for teacher expectations of successful learning are crucial to the system (Pollack, 1980)[6].

This is defintely a tall order for any teacher in any system, and Prichard (1977) so aptly sums up what makes an effective teacher as one who "orchestrates all aspects of the classroom environment in order to exert maximum suggestive impact for the purpose of freeing the mind's reserves." (p. 148)[7].

Knowing, from all these sources, what is identified as a good or even top-notch suggestopedic teacher, how are teachers trained to become the best they possibly can be? The next section deals with two main training programs, the one at the Suggestology Research Institute in Sofia and the one developed by Dr. Don Schuster at Iowa State University.

TEACHER TRAINING

Teacher training is a very important part of the success of suggestopedic teaching. Lozanov (1977) states that teachers must be trained in a number of areas. "First psychotherapeutically, second psychologically, physiologically, philosophically, and artistically in many aspects." (p. 89)[8] Schuster (1980) states that teachers need to be trained in establishing a warm

[5]Belanger, ibid, Journal of S.A.L.T., ibid, 1978.
[6]Pollack, "Education of the Whole Brain: Suggestopedia", ibid, 1980.
[7]Allyn Prichard, "A SALT Interlude: Suggestion, Sight Words, Statistics and the Single Wing", The Journal of S.A.L.T., Vol. 2, No's 3 and 4, pp. 138-148, Fall, 1977.
[8]Lozanov, ibid, Journal of S.A.L.T., 1977.

supportive atmosphere, how to supportively correct kids, how to implement suggestions in a natural way (both directly and indirectly), learn the art of "Yes" getting, and experience being video-taped with their students to be used for a critique.

The two individuals, Lozanov and Schuster, represent the "heads" of training institutes or training programs for the education of teachers in the use of suggestopedic teaching.

Bulgarian Training

In 1975, Bancroft wrote of the candidates who were trained at the Institute of Suggestology in Sofia. Trainees needed to be experts in their own field (foreign language) and they must have a personality which is energetic and dynamic. Over the period of three to six months trainees were expected to know the theory of suggestion (a la Lozanov) and demonstrate their ability in applying it in practice. Written and oral work, along with examinations were part of their training. Trainees were expected to feel confident in the classroom as well as develop an intuitive sense of how best to develop the abilities of the students. Using correct articulation, expression and gestures in reading the language dialogues is essential. Critiques are done by members of the Institute and by the teachers themselves.

a) Importance of thorough training:

Krasimira Pashmakova, the individual in charge of teacher training at the Suggestology Research Institute, writes in 1977 of the importance of thorough training, that teachers be

trained at least in part by Dr. Lozanov, that they are in constant contact with him, and that if any problem should come up, he is available for them to consult. This is particularly important because of three basic circumstances inherent with the training at Sofia. Teachers trained at the Institute: 1) work far from the center and do not have easy access to consultation once leaving training; 2) teachers trained at the Institute become instructors of other suggestopedic teachers and so must know the method very well; and 3) the teachers trained at the Institute will become authors of suggestopedic texts and other teaching materials and so need to be well versed in both the theory and practice of suggestopedia.

b) Content of training:

More current information indicates that training which was originally three to six months in length occurs now in a month and that extra training is provided if desired or necessary. (Pashmakova in McCoy, 1977). Teachers used to spend at least the first month observing another suggestopedic teacher and the second month practicing the method. Currently, (as of the McCoy article in 1977) the one month training has these obligatory sections:

Theoretical training, lectures given by Dr. Lozanov;

Learning suggestopedic process of learning and teaching;

Studying physiological processes taking place in students working in class;

Watching other teachers use the method, discussing what they've observed;

Practice in reading lessons with a background of music;

Teaching a group under direct and constant guidance, discussing with the supervisor the plans for every lesson;

Having a final meeting with Dr. Lozanov to discuss what they've achieved, as well as future plans.

c) Problems:

Pashmakova mentions that there are some difficulties which may result in mistakes being made which may invalidate the efficiency of the method, once the teachers have entered the training program: (McCoy, 1977, Pashmokova, 1977)

Having insufficient knowledge of their subject matter, methods for teaching that subject and of educational psychology;

Having insufficient acquaintance with suggestology or inability to put the theory into practice;

Habituation to former methods they've been taught in the past;

Misunderstanding of the requirements of suggestology, particularly the double-planeness of the teacher's behavior and its being geared toward tapping the reserve capacities of the mind.

U.S. Training

Training in the United States is taking place at Iowa State University in a summer school program, the first year of which teachers received weekly stipends, six quarter hours of credit and use of and access to stereo equipment and all necessary materials needed for the classroom with the understanding that the students trained in SALT techniques would use them the coming year in their respective classrooms. (SALT Journal, Vol. 1 No. 2).

a) Components-1979:

Teachers taking the summer school program now are no longer receiving stipends, which was part of a two year state-funded project, but are still expected to use SALT methods that coming year in the classroom. The schedule for summer school, 1979 for the SALT Training Workshop involved five weeks of class, three hours daily from mid-July to mid-August. Course syllabus lists five major areas of study: 1) introduction to SALT; 2) preliminary preparations which involves suggestive positive atmosphere, student preparation, and lesson plan preparation; 3) presentation of material which involves the three stages of presentation - review/preview, active and passive concertlike phases; 4) practice phase; and 5) research review. Each of the five major divisions is followed by some type of lab work, mainly in practicing the information presented (such as practicing giving different suggestions, doing mind-calming exercises, etc.).

b) Components-1980:

The plans for the 1980 summer class list these major areas of study: 1) introduction to suggestive-accelerative learning and teaching on suggestology/suggestopedia; 2) background, important variables and classroom procedures; 3) development, tryout and revision of teacher lesson plans, teaching practicum; 4) development of next year's training curriculum; 5) development of alternate forms of evaluation tests; 6) research problems and methodology; and 7) follow-up plans. Teachers are asked to bring copies of their old tests and exams to the summer workshop (lab course).

Specifically, such things as voice training, stage presence, singing, non-verbal communication, psychodrama, being more perceptive, enlarging on one's abilities to trust, having high expectations, overcoming biases and learning how to get across intentions have become important parts of previously reported teacher training programs.

In conclusion of this section, Dr. Schuster has published a teacher check list which individual teachers can use for rating themselves daily on their use of various aspects of SALT. This is reproduced in the Appendix portion of this paper.

Summary-Training, World-Wide

Teacher training is such a key issue that at the conference sponsored by UNESCO held in Sofia in December of 1978, four direct and one related recommendation were made by the experts at the conference. Specifically, these were:

1) In each Country all requests for scholarships for teacher training should be made through official channels. Efforts should be made to obtain more money for such scholarships.

2) Standards should be set up for the training, certification and maintaining of standards of suggestopedic training.

3) Different categories of competency of teachers should be used to reflect increasing levels of teaching performance in certification.

4) Suggestopedic teacher training should be started as soon as possible.

The one related recommendation:

1) An International Teacher Training Center should be set up in Sofia. This Center should be under the control of the International Association for Suggestology and Suggestopedia. Other centers may be established later in other Countries, also under the control of this Association. (Schuster and Miele, 1978, p. 222).

A great deal of sharing, as well as other recommendations were made at the conference, but it appears that this method is attracting the attention of many educators throughout the world.

CHAPTER VIII - RESEARCH NEEDS FOR THE FUTURE

In many of the reports about suggestology, suggestopedia and SALT, this author has encountered the call for more research in the area. According to Don Schuster (Schuster, Bordon and Gritton, 1976), the picture concerning the "why" and "how" of suggestive-accelerative learning is hazy and incomplete, and that although we know many of the details of the method, many more are missing.

GENERAL NEEDS

In agreement, Caskey (1977) states that progress can only occur on a sound research base. What he recommends is that:

> We draw the soundest conclusions possible about the effects and interactions of the identifiable variables as exhibited in past and present research.
>
> We be involved in the preparation of clear, concise, understandable and unseeable materials for the practitioner.
>
> Research ought to be programmatic, and incorporate relevant factors.
>
> Research should be in some way related to a theory, model or system in which the researcher either adds to or questions the validity of some portion of an existing theory statement, rather than formulating more theories.
> (p. 113 and 114)

Allyn Prichard, in his talk to fellow educators and investigators of suggestopedia at the Second International Conference in April of 1977, suggests that at long last, educational researchers have something worthwhile to do -

to get into the "how's" of teaching, not the "what's", then specifying the "how's" of teaching so as to exert maximum suggestive impact in order to release the mind's reserves (1977).

SPECIFIC NEEDS

Not necessarily in disagreement with Prichard, but in relation to their own particular studies, Held (1976), Winnykamen (1978) and Nelson (1980) spell out some very specific research needs for the particular populations they are working with.

Held

Held (1976) researched the use of SALT with a group of 64 fifth and sixth grade students in the teaching of rare English words, independent variables being three treatment groups, sex, grade level and reading level. Implication for further research as a result of his study are the need for research to determine these things: 1) which particular treatment is most beneficial in relation to grade and reading levels; 2) the effects of these treatments over time; 3) how to best operationalize these treatments in the elementary classroom; 4) the value of these treatments, and others, for both remedial and accelerated students; and 5) the effect of suggestion on children at various ages.

Winnykamen

Winnykamen, in her participation at the UNESCO conference in Sofia, 1978, is reported in Schuster and Miele (1978) to

have asked some useful questions, some general ones and some specific to the teaching of languages, the main area that suggestopedia was originally used in. Her questions center around how suggestopedia can be used when applied to languages with complex graphemes and for teaching languages with irregular phoneme-grapheme relationships. She also wonders whether or not suggestopedia will be accepted in schools and cultures which differ from Sofia, whether a less complex operetta would produce better results, and what research would reveal about the separate analysis of the various components of suggestopedia.

Nelson

In the conclusion of her thesis, Nelson (1980), as did Held (1976), asked some important questions as related to her research - the use of suggestopedia with 6 to 8 year old learning disabled boys in the learning and retention of a list of unknown words. She recommends that:

> More eloquent designs be used to investigate which specific elements are most effective with this population (ld).
>
> Further research is needed to determine effect over time;
>
> Research is needed to determine the most effective way to implement the approach with this population.
>
> Determine if there are limits to the effectiveness of the Lozanov approach.
>
> Several replications of the present study to verify the generality of the results.

Schuster

Schuster (1977) who has been involved with the Americanization of suggestopedia has a number of recommendations in the area of research. Questions he poses are:

> Which of the many parts contribute to the whole?
>
> Which ones can you eventually drop out?
>
> What different subject areas can be taught with SALT and at what level?
>
> Can you teach people to be creative using suggestopedia?
>
> Can you use it for college-level courses where the reading load is heavy?
>
> Will it help our "disadvantaged kids" who normally would be turned off and never graduate from high school?
>
> What relation does ability have to the benefits of suggestopedic instructions?

What is needed, according to the authors of the Manual for the Classroom Teacher (Schuster, Bordon, Gritton, 1976), are huge analysis of variance studies dealing with the simultaneous combinational effects of six to twelve indendent variables - their comment is that "these are not small, easy tasks!" Well put! The have identified a list of 21 independent variables which they feel are important in suggestive-accelerative learning and teaching:

Suggestive positive atmosphere
Early pleasant learning recall
Sex of student
Age of student
Ability level of student
Imaging ability of student
Chronic activity level of student
Chronic anxiety level of student
Music orchestrated with presentation
Breathing synchronized with presentation
Active presentation style
Image re-enactment during passive phase

Self-generated vs. instructor-presented images	Integrated lesson theme
Sensory experiencing of didactic material	Suggestively speeded practice
Preliminary physical relaxation	Instructor skill and training
Preliminary mind-calming	Instructor empathy and support
Practice (snowball) effect	

Considering these many variables, other questions arise, such as what is the best sequence (or sequences) in which to use these techniques? Is the essential core the ability to concentrate, use associative imagery and have the self-confidence in an established learning skill? If so, how is this accomplished? According to the authors of the Manual (Schuster, Bordong and Gritton, 1976), those are the characteristics which a memory genius uses naturally! They end the manual with a call for help from the reader to try the procedures, experiment and let them know what happened.

Summary

Whether the questions for research center around the "how's" such as verbal and non-verbal communication circumventing the anti-suggestive barriers, changing belief systems, the subtlties of suggestion, the tapping of the reserve potential of the mind or the "what subject areas to be taught and what content is most adaptable to suggestopedic style teaching, there definitely is a need for further investigation into this fascinating method. The underlying principles and the actual technique used in suggestopedia have the potential of affecting the whole educational system, not just in the United States, but world-wide.

CHAPTER IX
SUMMARY AND CONCLUDING REMARKS

In summarizing the content of this paper and the whole notion of the feasibility of the use of suggestopedia or SALT with the population of school children labeled as "learning disabled", the author is reminded not only by the current research but by the overwhelmingly positive subjective comments of both teachers and students in the "regular" classroom, as well as in the specialist's doman, that suggestopedia has a great deal to offer education in general and specifically special education. In their concluding remarks at the UNESCO Conference for Suggestology held in Sofia in Decmeber of 1978, the experts there came to the conclusion that "There is consensus that suggestopedia is a generally superior teaching method for many subjects and for many types of students, compared with traditional methods." (Schuster and Miele, 1978, p. 221)[1].

At this same conference, sponsored by UNESCO, Schuster and Miele (1978) point out that the objectives of suggestopedia must be to: 1) tap memory reserves, intellectual reserves, creativity reserves and reserves of the entire personality; 2) avoid tiredness; 3) create a pleasant learning experience; 4) help students adapt to society and 5) create a positive psychotherapeutic effect. (p. 212). Unfortunately, most of our educational methods are <u>not</u> doing that.

[1]Donald H. Schuster and Philip Miele, "Minutes of the Conference of Suggestology, Dec. 11-16, 1978, Sofia, Bulgaria", <u>The Journal of S.A.L.T.</u>, 1978, 3(3), pp. 211-222.

A discouraging remark on the problems inherent in some educational systems comes from Cecelia Pollack, a diagnostician and a special educator herself. In her study (1979) of the mental health of children, she found alarming facts about depression and suicide among young people with reports on various factors which could be considered causative. The one she considers the most important is rarely mentioned:

> Over and above broken homes and neurotic parents, five hours of a child's day may be spent in fearing failure, fearing the test, the recitation, the teacher's scolding, the threats of punishment, of suspension, fearing competition with peers, fearing their scorn, feeling guilt and shame at failing to live up to the expectations of parent and teacher. Day in and day out, school becomes a prison of negative emotions which lead to mental depression, to suppression of children's development and too often - suicide. Dr. Georgi Lozanov has a term for this type of illness - didactogeny. More important, he has a program for its prevention - suggestopedia. (p. 16-17)[2].

That certainly is a very strong condemnation of the school system as well as a high recommendation for suggestopedia and its supposed ability to prevent didactogeny from taking its toll on children.

As mentioned earlier in the paper, in the section on suggestion, Lozanov comments (1973) that it is true that suggestion is a universal means and as such "suggestion has been used to bar human development...But is it not for the same reason that we should take up this weapon, free it from the unorganized use and emply it for creation, to stimulate human progress." (p. 29 in Pollack, 1979).[3]

[2]Pollack, The Journal of S.A.L.T., ibid, 1979
[3]Lozanov, Problems of Suggestology, ibid, 1973

Because the student is aware, at least on some level - conscious or subsconscious - of everything that is going on around him and inside him, whether it be the color of the room, the smile or frown of the teacher, his own internal self-talk saying "I can't learn to read", feeling comfortable with his teacher, feeling like he won't be put down, if he makes a mistake, all the subtle, as well as overt verbal and non-verbal messages are registering. All the senses are alert and attuned to stimuli and are available to either hinder or aid in the learning process. The suggestopedic teaching system, whether called the Lozanov method or SALT addresses all of those areas through the recognition of the importance of suggestion and its influence on how well we learn, affecting what we even believe to be our innate human potential capacities.

It's been found that we are more open to accepting suggestions which will aid in our learning process if we are relaxed, physically and mentally, enjoying ourselves, have confidence in both ours and our teacher's ability, and have proof that we can learn to the capacity we were designed to be able to do. The three suggestopedic teaching principles are: 1) the joy of learning and absence of tension; 2) the unity of the conscious and paraconscious; and 3) the suggestive link which affects our belief system are all used in ways that make both teaching and learning enjoyable and beneficial for the teacher and student.

Because the learning disabled child has a number of additional barriers to deal with, whether it be perceptual

or motor disfunction, low self-esteem, impairments in academic and language areas, disorders of memory and thinking, he is more likely than the "regular" student to experience frustration and failure as measured by the successes of his peers. As a result, he may decide to give up and be the "dummy" he appears to be by comparison, become anxious, and develop a whole variety of coping and defense behaviors. These behaviors themselves create additional problems and compound the whole diagnostic and learning process. Hyperactivity, inattentiveness, irratability are just a few of these behaviors.

Suggestopedic teaching appears to address even these problems through the use of a positive suggestive teaching atmosphere, suggestions for dealing with the barriers to learning (the anti-suggestive barriers), relaxation exercises for both the body and mind, stimulation of the right brain fuctions, as well as the left, the use of imagery and positive self-statements. Individually, each of these has been used with the population of children experiencing learning problems, whether labeled as "learning disabled", or the child with a non-specific learning problem, one who is placed in a remedial reading setting in the classroom or at a reading linic, or one who has been referred for hypnotherapy.

On the basis of all the successes reported on the use of various components of suggestopedia, although not identified as such (relaxation therapy, imagery, self-statements,

and suggestions, right-brain/left-brain learning, and the techniques used in hypnosis), as well as the limited but positive reports of using suggestopedia with the population of "learning disabled" in both the clinic setting and regular public school setting, it is this author's conclusion that suggestopedia can and should be more widely used by teachers of children with learning disabilities.

It has been shown in a number of studies cited in this paper that suggestopedia as a whole can be used with children with learning problems (Nelson, Prichard and Taylor, Gritton, Schuster and Vincent). Hypnotherapy, being as similar to suggestopedia, has also been used successfully with children with learning problems (Krippner, Jampolsky, Sarles, Gardner, Willis). Additionally, various key components have been used successfully with both children who have no academic problems, as well as those who do. Relaxation therapy, in various forms, was used to inhibit hyperactivity (Kwako, Lubar, Nall, Ackermann, Mantione, etc.).

Imagery training and expressions are used to help develop the right-brain functions and reduce negative behaviors (Houston, Beebe, Murdock, Galyean, etc.). Self-statements and suggestions have been used to help with feelings of self-worth, developing better study habits, and over-coming anxiety reactions (Barber, Zuberbier, Lachniet, etc.). Right-brain/left-brain studies continue to help us understand how we learn (and unlearn) certain information. All of these separate components are parts of suggestopedia and have been shown to be valuable in the education setting.

At the Conference for Suggestology, December 11-16, 1978, in Sofia, Bulgaria, Dr. Stanley Krippner, one of the invited speakers, stated that he was pleased that Dr. Lozanov had developed a system which activates so many areas of the brain, particularly the right hemisphere and limbic system, often neglected in education. He strongly suggests that many children with learning disabilities are less handicapped genetically than by traditional education, based on the remarks of both Prof. Pollack and Prof. Schuster who have both successfully used suggestology with learning disabled children (Reported by Schuster and Miele, 1978).

Because it can be used with both small or large groups, it can be adapted to the self-contained, resource or tutoring settings. It could also be used to help sort out and assist those children who are not truly neurologically impaired or brain damaged, but for a variety of reasons, (maturational lag, negative attitude about self and one's learning capacity, a decision at an early age that one could not learn, etc.) have been diagnosed and treated as if they were "learning disabled". As in the case of "Jack" and "Jill", two students of Charles Gritton, mentioned earlier in this paper, many children can be helped to function to their fullest capacity and deserve that opportunity.

With all of this in mind, Schuster (1977) sums up the whole process with the thought that what is crucial is that the student is left with a concept that says:

"I can learn, I can learn very easily, and it's fun" and that learning is simply more efficient when you use all of the brain. Suggestopedia does all of that.

APPENDIX A

EXERCISES

APPENDIX A

PHYSICAL EXERCISES

A) Reach and Stretch: While standing, raise and stretch one arm as much as possible and hold this position for two to three seconds, return the arm to the side, then reach and stretch with the other arm. (Students may also be requested to stand up, bend over and try to touch their toes.)

B) Tension Waves: Divide the body into six sections, tense one section at a time and hold, progress from the feet, to the calves, to the thighs, to the lower abdominal muscles, to the upper abdominal area, to the chest. Hold, then relax the body parts in reverse order. It is possible to do the contractions in a wave-like motion after a little practice.

C) Three Turtle Exercises: i) Tense one side of the neck, then the other side and the front; ii) Let head flop forward and touch the chest, then lift shoulders behind the head, then pull the head up with the neck, tighten the back of the neck, let head flop forward again; iii) Lift shoulder and rotate head, with neck tensed, three times in one direction, then three times in the opposite direction; turn neck once or twice without tension.

D) Side Bends: Standing straight with hands to the side, slide hand down the side of the leg below the knee while bending the body sideways as much as possible. Repeat other side.

E) Yogic Breathing: Empty the lungs by breathing out through the nose. Exhale very deeply so that the lungs are

emptied of stale air. Pull in the abdomen as far as possible to help with the exhalation. Begin a slow inhalation through the nose (thus commencing to fill the lungs), continue breathing in through the nose and raise or distend the abdomen while slowly beginning to fill the lower lung. Continue the slow inhalation and distend the abdomen as far as possible and then the chest as far as possible, making this one single, wavelike movement from the abdomen upward. Continue the inhalation, drop abdomen, keep chest extended and raise shoulders. Slowly and steadily fill in this manner the lower lung, middle lung, and finally the upper lung with air. At the top of the inhalation, after the lungs have been filled to their capacity, pause and hold breath for several seconds and then start to exhale slowly through the nose. At the same time, drop shoulders, pull in abdomen, allow the body to relax. Empty upper, middle and lower lungs in the same slow and continuous manner in which they were originally filled. Pull abdomen well in towards the backbone at the completion of the exhalation process so as to squeeze out all the stale air. Take another breath immediately; do not pause between breaths. Deep, rhythmic breathing concludes the physical exercise section and leads naturally to the mind-calming exercise(s).

-From Bancroft, 1978
-More extensive explanation in
Shuste, Bordon and Griffin, 1976

MIND-CALMING EXERCISES
(Three to Five Minutes)

There are several types of exercises that can be used to calm the students' minds after they have relaxed physically. These include: watching one's breathing (Zen breathing), the little white cloud exercise or climbing a mountain.

The little white cloud exercise has the following pattern:

> Imagine that you are lying on your back on the grass on a warm summer day and that you are watching the clear blue sky without a single cloud in it (pause). You are lying very comfortably, you are very relaxed and happy (pause). You are simply enjoying the experience of watching the clear, beautiful, blue sky (pause). As you are lying there, completely relaxed, enjoying yourself (pause), far off on the horizon you notice a tiny white cloud (pause). You are fascinated by the simple beauty of the small white cloud against the clear blue sky (pause). The little white cloud starts to move slowly toward you (pause). You are lying there, completely relaxed, very

much at peace with yourself, watching the little white cloud drift slowly toward you (pause). You are enjoying the beauty of the clear blue sky and the little white cloud (pause). Finally the little white cloud comes to a stop overhead (pause). Completely relaxed, you are enjoying this beautiful scene (pause). You are very relaxed, very much at peace with yourself, and simply enjoying the beauty of the little white cloud in the blue sky (pause). Now become the little white cloud. Project yourself into it (pause). You are the little white cloud, completely diffused, puffy, relaxed, very much at peace with yourself (pause). Now you are completely relaxed, your mind is completely calm (pause), you are pleasantly relaxed, ready to proceed with the lesson (pause).

-From Bancroft, 1978
-More extensive explanation in Shuste, Bordon and Griffin, 1976

EARLY PLEASANT LEARNING RECALL
(Three to Four Minutes)

The purpose of this exercise is to stimulate or bring to the fore the sensations, feelings and abilities which students had much earlier in their lives, for example, during a period when bedtime stories were being read to them. (Typical instructions follow a Gestalt pattern in which the non-verbal components of the previous situation provoke a recall of the appropriate verbal and cognitive aspects.)

Return to an experience which made you eager to learn. Get the details of this early pleasant learning experience in your mind as vividly as possible. Use your imagination to fill in the following information, if you need to, in order to put yourself in the situation once again. Where were you? (pause) Were you in a room? (pause) Were there people around you? (pause) Who were they? (pause) How did you feel about what you were reading or learning? (pause) Take a look at yourself in this learning situation. How did your hands feel then? (pause) How did your throat and head feel that day? (pause) Recall how your whole body felt (pause). Recall how naturally motivated you were (pause). Recall the thoughts you were thinking (pause). (Bring your thoughts and feelings with you to the here and now and try to learn and enjoy learning in the same way today.)

-From Bancroft, 1978
-More extensive explanation in
Shuste, Bordon and Griffin, 1976

CLASS RELAXATION TAPE TRANSCRIPT

Please assume a position with both feet flat on the floor. Place your hands on your lap, and start relaxing. Begin deep, regular, rythmic breathing. I will count from 1 to 5. Inhale deeply with the count, then exhale slowly as I count from 1 to 10. Ready? Inhale - 2 - 3 - 4 - 5. Now exhale - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10. Again, Inhale - 2 - 3 - 4 - 5; Exhale - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10. Once more. Inhale - 2 - 3 - 4 - 5; Exhale - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10.

Fine. Now you are becoming very relaxed. There is a very comfortable feeling coming over you. Let your eyes close very slowly. Take another deep breath, hold, exhale, relax. Continue to relax as you concentrate on the sensation of floating, floating, down through your chair. Floating, floating, floating. Downward, downward, downward. A good heavy, relaxed feeling. Feel how relaxed and loose you are.

I am going to count once more as you relax more and more deeply, more and more completely. Ready - Inhale - 2 - 3 - 4 - 5. Exhale - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10. Your whole body is more and more relaxed. Breathe deeply again and allow yourself to relax as much as you can. Deeper and deeper. Floating downward. Very calm. Very relaxed. Very serene.

In this relaxed state you experience a feeling of well being and optimism that allows you to absorb new ideas more easily, to retain them longer, and repeat them readily. Maintain your body relaxation while your mind becomes more calm, more tranquil, eliminating all discordant thoughts. Breathe deeply. Calm and peaceful. Relaxing physically and mentally. Inhale - 2 - 3 - 4 - 5. Now exhale. More and more relaxed, more and more receptive to the new material and ideas which will be presented to you. I am going to count backward from 5 to 1 as you become more and more relaxed.

Ready. 5 - more and more relaxed - 4 - relaxing physically and mentally - 3 - floating down, very calm and peaceful - 2 - a very pleasant feeling of floating and relaxing - and 1 - now you are relaxed yet alert - a condition which allows you to be at your creative best. Very relaxed.

Very relaxed, very receptive. Savor this pleasant feeling as you repeat these ideas to yourself:
Say to yourself, "I, and only I, have control over my senses and faculties."
Say, "If I am called, I can respond immediately and effectively."
Repeat this idea, "I can become absorbed in new ideas and material."
Say, "I can eliminate all distracting and disurbing thoughts."
Say, "My mind is clear and calm."

Repeat this idea, "I can think clearly and concentrate easily."
Say, "I can improve my abilities and memory."
Repeat this idea, "I have confidence in myself."
Repeat that idea again, "I have confidence in myself."

Now you are relaxed but alert. Calm but attentive. If you have difficulty recalling any material covered today, simply take a deep breath, exhale slowly and say to yourself - "Relax." You will find that what you are trying to remember will return much more readily. Now I am going to count from 1 to 3. At the count of 3, let your eyes open but retain your relaxed and tranquil feeling while maintaining your state of alertness and awareness, while your teacher presents new and interesting material to you.

Ready - 1 - 2 - 3. Let your eyes open. Everyone now listen with attention and interest to the new material.
(Elapsed time - approximately 7½ minutes.

All right. Now everyone let your eyes close once more. Take a deep breath, exhale slowly. Relax and allow what you have learned to sink inward, slowly, deeply, indelibly.
Now I am going to count from 1 to 5. At the count of 5, let your eyes open and return to your normal state of awareness; refreshed, alert, feeling good. You will feel wide awake,

energetic. You will feel stronger and more capable. You will find it easier to be cheerful and optimistic. Your work will go better and easier. You will feel better than you have felt before. Ready - 1 - more and more alert - 2 - feeling stronger and better - 3 - returning to your normal state of awareness - 4 - happy and confident - and 5 - open your eyes everyone. You feel very good. Very refreshed. This feeling will persist for some time to come. This is the end of the session.

-From Caskey and Flake, 1976, pp. 22 and 23.

LEFT-BRAIN/RIGHT-BRAIN
EXERCISE WITH CHILDREN

Sit with your eyes closed in a comfortable position that you can maintain for a while. Breathe in deeply...hold... and relax your breath (repeat three times). Now breathe at your own rate and imagine the space in your skull that is your brain. Imagine, if you will, that there are two sides of your brain, which we call your left brain and your right brain. Now, focus your attention on your left eye and look up to the space in your skull that is your left brain (pause). Focus your attention on your right eye and look up onto the space in your skull that is your right brain (pause). Now, I will suggest to you several times to see, imagine or sense on each side of your brain. Enjoy these images as you continue to keep your eyes closed (pause). Look up to the left and see the number 1...On the right you see the letter A...On the left you see the number 2...On the right the letter B. On the left you see the number 3...On the right the letter C. On the left the number 4...On the right the letter D. On the left the letter E...On the right the number 5. On the left imagine a juicy red strawberry...On the right imagine a beautiful green pine tree... On the left you imagine a firm yellow lemon. You take a knife and cut a slice of the lemon and just touch the tip of your tongue to taste the lemon. On the right you smell newly cut grass...On the left, you feel soft red velvet...On the right you hear the gentle sound of wind chimes...On the left you see a race car speeding towards you. On the right you taste your

favorite ice cream...Now, imagine that a soft, fluffy cloud comes along and picks up your imaginary or kinesthetic body. You can tell the cloud to take you anywhere you want to go and it will take you there. It will gently set you down and when you are ready to return, the cloud will bring you back here in the classroom into your physical body. Now, you have a minute of clock-time equal to all of the time that you need to have an adventure on your cloud. Begin (one minute:) Now, it is time to come back (pause). Your cloud gently picks you up and brings you back here into the classroom and into your physical body. I will count to 10. Join me at the count of 6, stretching your toes and fingers as we count and opening your eyes at the count of 10. 1...2...3...etc...10.

-Maureen Murdock, Santa Monica, CA, "Brain Child in the Promised Land, Dromenon

APPENDIX B

SCHEDULES, LISTS, SAMPLE LESSON, CHECKLIST, DIAGRAM

APPENDIX B

SUGGESTOPEDIC DAILY CLASS SCHEDULE
(Fifty Minute Class)

INITIAL ORIENTATION AND TRAINING CLASS SCHEDULE
(Secondary Level and Adults)

TIME		TOPIC OR ACTIVITY
00-10		Introduction and Explanation
	00-02	General theoretical basis
	02-04	Current use and research results
	04-06	Suggestopedic process
	06-07	Outline of initial class and relaxation training
	07-08	Outline of daily class for rest of project
	08-10	Questions from students
10-22		Relaxation Training
	10-11	Description of relaxation training
	11-12	Purpose and use during project
	12-22	Relaxation training sequence
22-50		Initial Class Material Presentation
	22-28	Relaxation sequence
	28-48	Presentation of class material
	48-50	End of class sequence

DAILY CLASS SCHEDULE

00-20		Regular Class Activities (Review old material, discussion, exercises, tests, questions and answers.)
20-27		Relaxation Sequence
27-48		Presentation of New Material
	27-34	First Presentation (Straightforward presentation with instructional materials and/or outer references). External/ Active/Relaxed
	34-41	Second Presentation (Soft presentation, no outer references or materials). Inner/ Passive/Relaxed
	41-48	Third Presentation (Authoritative presentation, no outer references or materials). Inner/Visual Imagery/Relaxed
48-50		End of Class Sequence

-From Caskey and Flake, 1976, p. 19

SCHEDULE AND EXERCISES

These will include affirmations given to the class as a whole as well as each student's own special affirmation. The protocal that will be used is as follows: Except for week #1, each week will be the same with variations in the affirmations used. The time period will span seven months, Oct. 1, 1979 to April 30, 1979.

Week #1
1. Administer self-concept test.
2. Introduction to concepts of stress management

Week #2 (Through April 30)	9:30 A.M.	1:30 P.M.
Monday	1. 5-10 Min. progressive relaxation 2. Guided exercise 3. Affirmations	1. Progressive relaxation 2. Affirmations
Tuesday	1. Progressive relaxation 2. Affirmations	1. Progressive relaxation 2. Affirmations
Wednesday	1. Progressive relaxation 2. Affirmations	1. Progressive relaxation 2. Affirmations
Thursday	1. Progressive relaxation 2. Affirmations	1. Progressive relaxation 2. Affirmations
Friday	1. Class discussion of the role negative emotions play in the stress response. 2. Guided exercise for releasing and forgiving a negative event or situation that occurred during the week.	1. Progressive relaxation 2. Repeat guided exercise 3. Affirmations

The following is an example of a guided exercise for releasing a negative feeling:

1. Student spends a few minutes thinking of negative feeling he may wish to release.
2. Three-five minutes to physically relax.
3. Now I imagine that I am standing in the middle of a beautiful field. It is a lovely summer day. The sky is blue, the sun is warm and I feel good all over. I take a moment to look at the scenery - I smell the smells, see the colors, and hear the sounds. I notice the other side of a hill covered with buttercups. I begin to walk toward the hill, continuing to be aware of the scenery about me. It feels so good to be alive on such a beautiful day. The warm sun is relaxing. I am at the foot of the hill now and I begin to climb toward the top. I am on top of the hill now and notice at the foot of the other side of the hill is a calm, clear lake. I now become aware of that negative feeling I have kept inside of me (anger, fear, sadness, etc.) and I become aware of how it makes me feel physically. I imagine what that feeling must look like. I take it out and hold it in my hands. Now I throw it into the lake and watch it disappear under the surface of the water. I pay attention to how my body feels now. I again look around at the beautiful day. I see myself radiantly happy and healthy and I affirm to myself - everyday in every way I am becoming happier and healthier. I open my eyes, knowing that I will carry this wonderful feeling with me for the rest of the day.

Positive affirmations that will be used throughout the seven months are as follows:

I am calm and serene.

Everyday in every way I am becoming more and more healthy.

I am filled with love.

I am filled with loving kindness.

I am in charge of my feelings and emotions.

I am responsible for my thoughts and actions.

Everyday in every way I am becoming happier and happier.

I accept myself completely, here and now.

Everyday in every way I am getting better and better.

I have everything within myself to enjoy every minute of every day.

I am relaxed.

With every breath I take I am becoming happier and healthier.

I am safe and comfortable.

-From Mary Lachniet, RN, Holt, Michigan

TEACHING WITH LOVE
Vowel Sounds, Sample Lesson

To teach vowel sounds, JoLene creates two imaginary apartment houses. In the LONG apartment house live all of the objects that have long vowel sounds. In the SHORT apartment house live all the objects with short vowel sounds. Each vowel sound has its own apartment. The participants closed their eyes and imagined entering the long e apartment, seeing the objects while JoLene guided them. Every word with a long e sound was said twice to emphasize it as a long e word. This was the active phrase--somewhat different than what is often seen in the active phase of SALT techniques. Nevertheless, it has been found to be very effective. Encouragement was provided to allow the long e sound to become clearer as the participants visualized themselves proceeding through the apartment. For the concert review, just the long e words were mentioned while the participants allowed the images they made during the active presentation to flow freely through their minds. JoLene has found that children taught vowel sounds with this method learn them much more easily.

-From JoLene Somsky

SALT TEACHER'S CHECKLIST

This checklist of SALT classroom activities can be used both as a guide for the teacher in preparing SALT lesson plans, as well as a checklist for evaluating teacher use of SALT procedures. The checklist here is the result of tryout and revisions over several years of classroom use and is reasonably satisfactory for both purposes. No claim to perfection is made and no attempt has been made to compare teachers by totalling item responses.

Rate yourself each day; 0-Not possible, 1-Not used, 3-Used, 4-Much use.

Physical arrangement of room

1. Attractive room, posters and displays
2. Grouped, semicircular arrangement
3. Lighting turned off (subdued)
4. Quality music reproduction equipment

Teacher preparation

5. Authority, "I can help you learn," or equivalent
6. Positive beliefs, "You students can learn this easily."
7. Acceptance and respect for all students shown

Student preparation

8. Suggest, "School is a place to learn," or equivalent
9. Suggest, "Learning is easy, fun and efficient."
10. State, "Rely on me (teacher) for learning."
11. Physical relaxation exercises, 1-5 minutes (optional)
12. Mind calming exercises, 1-5 minutes
13. Early pleasant learning restimulation, 1-2 minutes
14. Success goal-setting imagery

Presentation of material

15. Review of previously learned material
16. Preview, new material given briefly
17. Positive use of gestures and facial expressions
18. More material than normal presented (stuffing)

Active session

19. Dynamic, dramatic deliver
20. Three level variation of intonation
21. Varied pace in delivery, slow-fast
22. Students have material to watch
23. Imagery given by teacher or requested of students

Passive session

24. Preliminary relaxation, 1-3 minutes
25. Material presented evenly and calmly
26. Material given with background music
27. Music, breathing and material synchronized
28. Associative, free-flowing imagery encouraged

Practice session

29. Role playing, games, skits or songs
30. Psychological protective personalities given (new identities)
31. Self-corrected quiz, not collected nor graded
32. Error correction done indirectly and immediately
33. Mind calming at close

-From Schuster, 1980, pp. 57 and 58.

SAMPLE SUGGESTOLOGY MUSIC LIST

Bach, J.S.

--Largo from Concerto in G Minor for Flute and Strings, BWV 1056 (2:53)
--Aria (or Sarabande) to The Goldberg Variations, BWV 988
--Largo from Harpsichord Concerto in F Minor, BWV 1056 (2:40)
--Largo from Solo Harpsichord Concerto in G Minor, BWV 975
--Largo from Solo Harpsichord Concerto in C Major, BWV 976
--Largo from Solo Harpsichord Concerto in F Major, BWV 978

Corelli, A.

--Sarabanda (largo) from Concerto No. 7 in D Minor
--Preludio (largo) and Sarabanda (largo) from Concerto No. 8 in E Minor
--Preludio (largo) from Concerto No. 9 in A Major
--Sarabanda (largo) from Concerto No. 10 in F Major

Handel, G.F.

--Largo from Concerto No. 1 in F (Brass) from Music for the Royal Fireworks
--Largo from Concerto No. 3 in D (brass) from Music for the Royal Fireworks
--Largo from Concerto No. 1 in B-Flat Major Op. 3 (woodwinds and strings)

Telemann, G.

--Largo from Double Fantasia in G Major for Harpsichord
--Largo from Concerto in G Major for Viola and String Orchestra

Vivaldi, A.

--Largo from "Winter" from The Four Seasons
--Largo from Concerto in D Major for Guitar and Strings from Boroque Guitar Concerto
--Largo from Concerto in C Major for Mandolin, Strings and Harpsichord, P. 134 (1:55)
--Largo from Concerto in F Major for Viola D'Amore, Two Oboes, Bassoon, Two Horns and Figured Bass, P. 286 (4:27) all from Vivaldi: Three Concertos for Viola D'Amore, Two Concertos for Mandolin

Vivaldi, A. (cont'd)

--Largo from Concerto in D Minor for Viola D'Amore, Strings and Harpsichord, P. 288 (2:15)
--Largo from Flute Concerto No. 4 in G Major

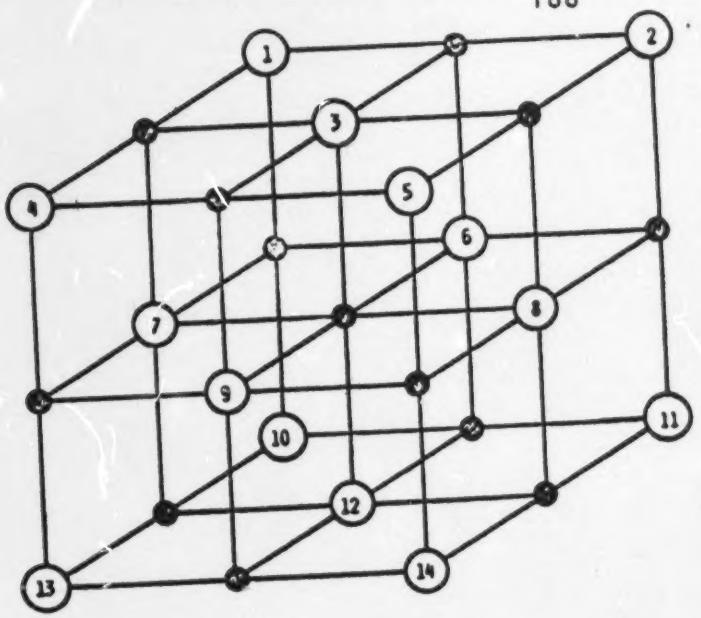
(This music list was compiled for the course "Suggestopedia: A New Training Technique". The session was designed by Training Consultation Services Office, Dallas Region Training Center, U.S. Office of Personnel Management, Dallas, Texas, Tom Mirabel, 1980).

Also - Steve Halpern's "Ancient Echos" and "Spectrum Suite II" from Halpern Sounds, Inc., Palo Atlo, California and "Environments" from Syntonic Research, Inc., New York.

Two Diagrams:

1) SALT

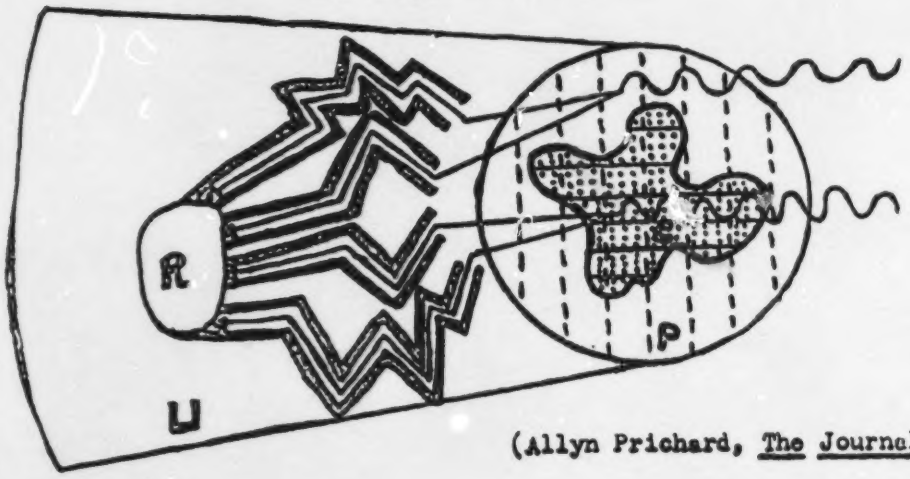
2) Path of Suggestion



1. Aesthetic Setting
2. Encouraging Athosphere
3. Music Background
4. Relaxation
5. Positive Suggestions
6. Ming (Calming
7. Teacher Credentials
8. Method Credibility
9. Visual Imagery
10. Bi-lateral Hemisphere Input
11. Multi-sensory
12. Active Presentation
13. Non-critical Correction
14. Whole Brain Learning

(Owen Caskey, The Journal of SALT, 3(3), p. 163)

The Path of Suggestion as it Activates the Mind's Reserves



(Allyn Prichard, The Journal of SALT, 3(4), p.26

263

Setup

R Reserves of the Mind

U Unconscious Awareness

Logical Anti-Suggestive Barrier

Intuitive Anti-Suggestive Barrier

Ethical Anti-Suggestive Barrier

Suggestion Stemming From the Environment

C Conscious Awareness

P Peripherally-Conscious Awareness

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